

THE INFLUENCE OF SOCIAL MEDIA ON CROWD BEHAVIOR AND THE OPERATIONAL ENVIRONMENT

A Monograph

by

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ABSTRACT

THE INFLUENCE OF SOCIAL MEDIA ON CROWD BEHAVIOR AND THE OPERATIONAL ENVIRONMENT, by MAJ Justine S. Krümm, 69 pages.

Since the Twitter Revolution and the penetration of the Internet, social media has dramatically altered how the world interacts and responds to crisis. The United States Army has yet to fully recognize the role social media plays in determining the organization, momentum, and scope of crowds. As demonstrated throughout history, particularly in the twenty-first century, crowds are a highly disruptive means for society to communicate their agenda for change and threaten the status quo. By decreasing the time it takes for information to spread and widening the audience to which information is accessible, social media has become one of the most influential factors in shaping the operational environment and dictating civilian-military response measures. The Army's doctrinal response to addressing crowd behavior and social media is to approach the subject as three distinct elements for consideration; dividing responsibility between the public relations, intelligence, and security force communities. By illustrating the impact of the social media phenomenon on the operational environment, this monograph will demonstrate the Army's need to develop doctrine that merges its methodology and terminology into a coherent multidisciplinary approach. In order to be complete and relevant, this approach must recognize social media as the leading mechanism for inciting and organizing a crowd; responsible not only for sustaining its momentum and fueling its fervor, but for ultimately broadening the scope of the crisis across ideological, cultural, and international borders. This monograph will argue that as technology continues to permeate societies across the globe, social media will serve as the primary means for the interchange of worldviews, ideology, and other aspects of culture. As a result, this monograph advocates for the United States Army's need to expand its understanding of the operational environment, incorporating the multidimensional aspects of social media and crowd behavior across its lexicon, tactical techniques, and operational procedures.

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INTRODUCTION

Contemporary doctrine's attitude towards social media and crowd theory is similar to pre-2006 counterinsurgency techniques. Just as counterinsurgency and wide area security operations became their own distinct form of warfare within the range of military operations, managing the crowd and social media phenomena will soon surface as a form of warfare vital to securing a national interests. Since the Twitter Revolution in 2009 and the continued permeation of the Internet across the world, social media has dramatically altered how the world interacts and responds to crisis. By decreasing the time it takes for information to spread and widening the audience to which information is accessible, social media has become one of the most influential factors in shaping the operational environment and dictating civilian-military response measures. Social media is the mechanism responsible for influencing crowd behavior; as demonstrated by recent events, crowds are emerging as the society's vehicle for shaping the operational environment of the twenty-first century. Social media influences crowd behavior in the following ways: Social media is the lead mechanism for inciting and organizing a crowd; social media is responsible for sustaining a crowd's momentum and fueling its fervor; and social media broadens the scope of the crisis across ideological, cultural, and (physical) international borders. The theory of crowd behavior emphasizes that to understand crowds it is essential to understand why a crowd gathers, its physical composition, and how a crowd communicates. The United States Army has yet to fully recognize the role social media plays in determining the organization, momentum, and scope of crowds. The Army's doctrinal response to addressing crowd behavior and social media is to approach the subject as three distinct elements for consideration; dividing responsibility between the public relations, intelligence, and security force communities. Examples from Tunisia, Egypt, Iran, Libya, South Korea, the United States, and the United Kingdom demonstrate the effect of social media on crowd behavior, the role of social media in shaping the operational environment, and its ability to transform a local issue into an international firestorm. These seven

examples highlight the need for the Army to update its doctrine to take into account the ability of social media to organize a crowd, fuel its momentum, and expand its scope. Understanding the role of social media in crowd behavior and taking a holistic approach to managing and responding to a crowd will allow the Army to better manage its response time, contain the situation, and shape the situation to meet its desired outcome.

Social Media's Effect on the Operational Environment

The increased use of technology and its inherent multimedia applications continues to expand the reach of communications across the globe. The penetration of technology, specifically the Internet and the mobile phone, has dramatically altered how the world interacts and responds to crisis. Since 2005, the rapid expansion of technology has generated opportunities for exchanging information, disguising ideological motivations under the auspices of information and news. Factoids dominate the multimedia messaging spectrum, consumed as fact and responsible for fueling the motives for political and social change. Locally tailored factoids, pushed by social media links such as Twitter coupled with applications such as Google Maps, present a new, expedient means of organizing and rallying individuals around a specific cause. As defined by Merriam Webster, social media encompasses forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content (such as websites for social networking, microblogging, video and imaging).¹ Social media and its multitude of applications present a new weapon for consideration within the operational environment. Coined by John Arquilla and David Ronfeldt as swarming, “the digital domain can easily span time zones, geography, economic, and cultural barriers. The Arab Spring demonstrated how social media can congregate its users digitally, then quickly shift to directing

¹Merriam Webster, <http://www.merriam-webster.com/medical/socialization> (accessed 7 November 2012).

or influencing some form of focused physical mass or swarm.”² The ability for social media to generate the basis for a crowd’s assembly exponentially shortens the information-to-organization and demonstration time lapse.

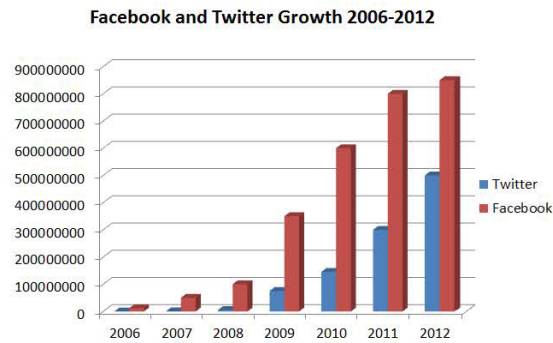


Figure 1. Facebook and Twitter Growth 2006-2012

Source: Created by author, using data from <http://dstevenwhite.com> and <http://news.cnet.com>; World Telecommunication/ICT Indicators Database, International Telecommunications World Database, and the World Bank.

²Lieutenant Colonel Brian Petit, “Unconventional warfare, meet social media,” *Special Warfare* (April-June 2012), <http://www.soc.mil/swcs/swmag/archive/SW2502/SW2502SocialMediaAndUW.html> (accessed 8 August 2011); see also, John Arquilla and David Ronfeldt have well-developed theories on swarming dating back to *In Athena’s Camp* (1997) and *Networks and Netwars* (2001).

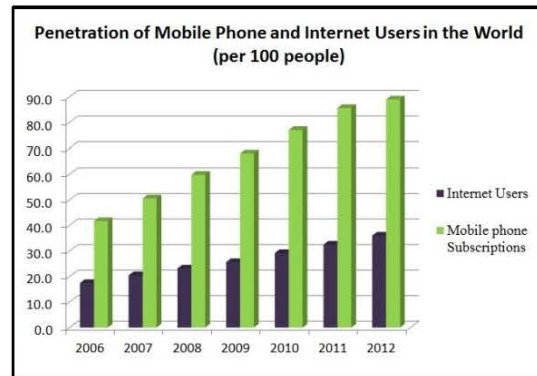


Figure 2. Penetration Mobile Phone and Internet Users in the World (per 100 people).
 Source: Created by author, using data from <http://dstevenwhite.com> and <http://news.cnet.com>; World Telecommunication/ICT Indicators Database, International Telecommunications World Database, and the World Bank.

In a world where a media device is more accessible than running water, the cell phone has become the single most powerful tool for organizing a community of individuals into a crowd or demonstration.³ “Websites, e-mail, paper mail and phone calls don’t come anywhere near achieving...” the same effects as mass media messaging and near real-time streaming video.⁴ Network texting not only pushes information, it has the ability to raise money and to advocate political and social change. As demonstrated during the 2012 Presidential Elections, for monthly fees that range from 2,000 to 30,000 dollars, President Obama’s campaign contracted the Mobile Commons Company to send mass text messages, collect data, and data mine on behalf of its political agendas. The American Red Cross received over 32 million dollars in ten-dollar lump

³Nancy Gibbs, “Your Life is fully Mobile,” *Time Magazine* (27 August 2012). Based on a Time Mobility Poll, Qualcomm co-wrote this article, surveying over 4,700 respondents online and by 300 phone-in respondents, from eight countries, from 29 June to 28 July 2012. In this census, there was no discrimination made between either the income or the background of the participating individuals. The countries included the U.S., South Korea, India, China, the United Kingdom, Indonesia, South Africa, and Brazil.

⁴Kate Pickett, “Doing Good By Texting,” *Time Magazine* (27 August 2012).

sum texts in support of the 2010 Haiti earthquake relief efforts.⁵ Dosomething.org, has a following of over 500,000 members and proves to be highly effective in engaging “young people” and encouraging participation in community service. Social media and networking companies, both profit and non-profit, further maintain the capability to use geographical data to target messages toward specific local regions of interest and activism. The potential for positive action is limitless with the propagation of social media technology and extended social media networks.

Social media technology continues to revolutionize the collection, identification, and analysis capabilities of law enforcement agencies. Every time a smartphone connects to network or media application, the host site is collecting informational data points on its users. Without a user’s knowledge, a smartphone can collect visual, audio, geographical (locational/GPS) and data mine an individual’s contacts, activity history, and favorites. These applications have the potential to provide law enforcement and military officials with near-real time information on a crowd’s genius, disposition, engineering, and center of gravity. Exploiting the capabilities offered by technology, media law enforcement and military officials can deconstruct the crowd to determine what moral or physical factors are enabling its freedom of action or will to act. By having the ability to discern a crowd’s leadership, know the location of its assembly, and understand the temper of the crowd’s participants, military and law enforcement agencies can better posture to thwart violence. This ultimately allows them to set the conditions for the appropriate authorities to address the public concerns, and protect its citizen’s life and property.⁶

⁵Ibid.

⁶Massimo Calabresi, “The Phone Knows All,” *Time Magazine* (27 August 2012). It is important to recognize that while law enforcement and military action are subject to oversight and protocol requirements for accessing and exploiting these capabilities, external agencies and private initiatives are not subject to the same constraints or legalities.

The transparency that social media offers has its trades-offs. From the ability to generate near real-time assemblies and support for a cause, to law enforcement's ability to monitor and react with just as much speed, social media has created a responsive environment. In this new technology induced environment, the consequences of immediately reacting without the tempered element of time, can complicate the issues and inadvertently generate negative consequences for all parties involved. The tenuous relationship between the military and the media illustrates the consequences of this domino effect.

Media coverage of military action and inaction directly influences the perceptions of the population, political leaders and international organizations. The public's increased access to the Internet and handheld media devices has accelerated this process. In an effort to mitigate potential threats to ongoing security and stability operations, contemporary military doctrine encourages commanders to engage directly with the local populace, to build a foundation of trust among the people, and professional relationships amongst community stakeholders. For example, counterinsurgency doctrine promotes the use of town meetings and other community events to highlight local and regional activities and improvements: "These engagements give commanders additional opportunities to assess their efforts' effects, address community issues and concerns, and personally dispel misinformation."⁷ Recognizing the influence of the media on the disposition of the population, what often results is a battle of perceptions. Therefore, it becomes vital for military and law enforcement to counter-balance negative exposure and supersede the efforts of nefarious reporting elements.

The dangers of social media are inherent in its ability to transmit information instantaneously across the globe. Social media's release of information is not constrained to permissions, a hierarchy of command, social protocol, or etiquette. Furthermore, the credibility of

⁷Headquarters, Department of the Army, Field Manual (FM) 3-24, *Counterinsurgency Operations*, (Washington, DC: Government Printing Office, 2006), 5-10.

the social media or social networking site is at the discretion and interpretation of the user. As a result, multiple businesses, individuals, and nefarious non-state actors seek to take advantage of the social media phenomena for their own profit. The use of social media as a recruiting device has both its negative and positive applications. While businesses use social media to recruit applicants and promote marketing campaigns, threat-based organizations and individuals seek to do the same. Consequently, the role and the accessibility of social media must remain at the forefront of developing a comprehensive understanding of the operational environment. Social media requires non-linear thinking and an iterative approach to problem-solving. Due to the reach, accessibility, usability, immediacy, and permanence characteristics of social media, the military must constantly monitor, manage, and target social media spectrum in order to appreciate the consequences it can generate.

The Evolution of Crowd Theory

The evolution of crowd theory has a direct correlation to the methods and practices used by security forces to attempt to achieve public order. As history demonstrates, the lack of understanding of the significance of the crowd or a misinterpretation of its being most often leads to security practices that inadvertently escalate public disorder. Charles-Marie-Gustave Le Bon was the twentieth century's foremost expert on herd behavior and crowd physiology. A French social psychologist and physicist, Le Bon authored numerous studies on cultural evolution and the study of the crowd. Le Bon defined the concept of the crowd for the twentieth century. According to Le Bon the crowd is a massing of large numbers of people together that can consequentially generate an irrational, collective emotionality capable of producing unusual types of activity.⁸ Le Bon's argument centered on the idea that a collective mind would emerge because of a crowd's organizing, subsequently influencing the behaviors of its masses. He further

⁸Gustave Le Bon, *The Crowd* (New Brunswick, NJ: Transaction Publications, 1995), 24 and 41.

espoused that the collective character of a crowd would form an unconscious collective mind; emotion and fervor are the motivators of a crowd; and therefore highly subject to manipulation by those with nefarious agendas. Le Bon warned that the consequences of a crowd could result in a dramatic upset of the status quo, most notably social revolution.⁹ Le Bon wrote over twelve studies analyzing culture and the impact of the crowd on society. Published in 1895, *The Crowd* analyzes the nature and impact of the crowd within multiple political movements. In the years following Le Bon, a British neurosurgeon by the name of Wilfred Batten Lewis Trotter developed a parallel theory on the herd instinct. Basing his research on the study of animal behaviors, Trotter's theory on social behavior argued that forming crowds, acting and behaving in mass, is an instinct trait among nearly all species. Up until the twenty-first century, Trotter's 1908 *Instincts of the Herd in Peace and War* and Le Bon's *The Crowd*, served as the theories explaining the anatomy and behavior of a crowd.

In several cases, the aftereffects of the 2010-2011 Arab Spring demonstrated the dynamic impact of a crowd's presence. With outcomes ranging from violence to social reform, the effects of the crowd on the operational environment demonstrate the foundational relevance and abstractness of Le Bon's theories in the contemporary environment and the importance of further research into the subject. The collective research on the anatomy of a crowd, coupled with recent events, highlights the negative consequences that can result from lumping crowds and social movements into the same category.¹⁰ Distinctively social movement demonstrations are a specific type of crowd.

⁹New World Encyclopedia contributors, "Gustave Le Bon," *New World Encyclopedia*, http://www.newworldencyclopedia.org/entry/Gustave_Le_Bon (accessed 30 October 2012).

¹⁰Anthony Giddens, and Mitchell Duneier, *Introduction to Sociology* (New York: W.W. Norton, 2000), 510. Similarly, Le Bon's theory that a crowd will foster anonymity and can generate strong emotions also remains valid. John Macionis, *Sociology* (Upper Saddle River, NJ: Prentice Hall: 2003), 605.

For nearly a century, military and civil responses to the dilemmas posed by a crowd served to generate more negative consequences than enduring solutions and resolutions. By the late nineteenth century, works by philosophers such as Friedrich Nietzsche and Søren Kierkegaard criticized what they coined as the “herd instinct.” Their ideas challenged the accepted views of an unconscious swarming and anonymous actions.¹¹ It was not, however, until the 1960s that these criticisms gained traction, causing social scientists to re-evaluate their understanding on the anatomy and psychology of a crowd. In 1968, Dr. Carl Couch’s study on the *Collective Behavior* redefined the anatomy of a crowd, demonstrating that many of Le Bon’s theories on the characteristics of a crowd were empirically invalid.¹² By applying a sociological perspective, Couch espoused that the crowd is similar to any other social system; therefore, to accurately study the crowd one must distinguish clearly between the characteristics of a crowd’s members to account for the behavior of the crowd.

In 2001, a study conducted at Pennsylvania State University validated Couch’s theories and historical analysis through further evidence based on empirical scientific data.¹³ The 2001 study focused on reevaluating predominant military and law enforcement concepts on crowd control. The study concluded that crowds are not homogeneous entities. Their participants are not unanimous in their motives and seldom-in unison, and that throughout a crowd’s transformation, its participants are able to maintain, to some degree, individual cognition. This study presented the military with a purposed solution to crowd control, a four-phased decision-making process:

¹¹Crane Britton, *The Anatomy of Revolution* (New York: Vintage, 1965), 84.

¹²Couch disputed the pathological nature of crowd behavior argued by Le Bon, criticizing the lack of empirical evidence and the overemphasis on cultural factors. Couch criticized the traditional stereotypes associated with a crowd: suggestibility, destructiveness, irrationality, emotionality, mental disturbances, lower-class participation, spontaneity, creativeness, and lack of self-control.

¹³Dr. John M. Kenny, Dr. Clark McPhail, Dr. Peter Waddington, Lt. Sid Heal, Maj. Steve James, Dr. Donald N. Farrer, Dr. Jim Taylor, Capt. Dick Odenthal, *Crowd Behavior, Crowd Control, and the Use of Non-Lethal Weapons* (Pennsylvania State University, Institute for Non-Lethal Defense Technologies, Applied Research Laboratory, 2001), 12.

pre-incident planning; background information and intelligence; encouraging relationships and ownership; and acceptability, by redefining what it means to achieve their desired outcome.¹⁴ Espousing that crowd control requires its own specific analysis and deconstruction, this study considered the influence of an influx of information, research, and studies on the influence of social media on crowd behavior and formations. The study concluded that the military must continue to stress active prevention, mitigation and shaping operations, rather than post assembly confrontation and crisis response. In line with the theory proposed by Dr. Couch, the military defines the crowd as a gathering of a multitude of individuals and small groups that have temporarily assembled in the same place, represent a group belief or cause, and consequentially assume a sense of anonymity.¹⁵

Researchers agree that the violent transformation of a crowd into a riot is the result of planning and organization. Varied based on location and objective, violent crowds are not without leadership, they demonstrate a hierarchal chain of command, communications structure, and distinct physical composition. Structurally there are three major components. The first component is the armed fighters, most often trained in anti-law enforcement techniques. The second is the larger mass of inexperienced rioters, used in harassment and shaping functions. The third component is the screening mechanism of the actions of the first two proponents, with the secondary effect causing overwhelming confusion. As the crowd begins to self-organize, leadership will resonate from within, however, an external source will continue to direct and influence the momentum of the crowd with a larger more grandiose objective. Once formed, the communications mechanism between these elements will avoid the public forums of social media, using isolated privatized communication means for planning and information distribution

¹⁴Ibid., 22.

¹⁵Headquarters, Department of the Army, Field Manual (FM) 3-19.15, *Civil Disturbances*, (Washington, DC: Government Printing Office, 2005), 1-7.

within a specified users network. In the action phase, the violent crowd will rely on messengers, cellular phones, or personal hand held communication devices, such as radios. A crowd once formed will continue to use social media as a means to recruit and organize external support and convey its narrative.

Recent studies show that crowds are more of a process than a homogeneous entity by design. A crowd in being has a beginning, middle, and end. While the behavioral phenomenon coined as the “herd mentality” does play a major role in determining the outcome of a crowd’s disposition, research shows that the collective identity of the crowd will not cripple individual cognition.¹⁶ Consequently, the “herd mentality” serves as the mechanism responsible for shaping a crowd’s collective identity, based on the ability for a minority to influence the decision-making and actions of the majority.¹⁷ Scientific research concludes that a minority of five percent has the ability to influence a crowd’s direction, unbeknownst to the remaining ninety-five percent.¹⁸ In the contemporary operational environment, social media is the driving mechanism enhancing the influence of the “herd mentality” phenomena, affecting each phase stage of a crowd’s

¹⁶Kenny, et al., 20-23. While crowds have the propensity to become violent, violence does not uniquely distinguish one crowd formation from another. Even in situations where a crowd assembles for non-violent reasons, violent and extreme tendencies are easily perpetuated and prevailing. Nefarious actions of a crowd constitute one of several intermediate phases a crowd may experience. Composed of clusters of similar individuals, a crowd can have motivations that are inconsistent and can vary. At the micro-level, these clusters operate in unison, such as assembling and dispersing in concert. At the macro-level, these actions in concert give the appearance of harmonious action. However, contrary to historical interpretation, recent studies conclude that crowd participants do not generally assume a sense of anonymity.

¹⁷Rick Nauert, PhD, “*Herd*” *Mentality Explained*, (University of Leeds, Psych Central, 2008), <http://psychcentral.com/news/2008/02/15/herd-mentality-explained/1922.html> (accessed 9 August 2012). In a 2007 study, by Scientists at the University of Leeds, the herd mentality surfaced as the contemporary explanation for why humans flock like sheep and birds, subconsciously following a minority of individuals.” Dubbed as the “herd” mentality, this term encompasses a behavioral phenomenon that is consistent among several species.

¹⁸Ibid. See also, John R. G. Dyer, Christos C. Ioannou, Lesley J. Morrell, Darren P. Croft, Iain D. Couzin, Dean A. Waters & Jens Krause, *Consensus decision making in human crowds*, *The Association for the Study of Animal Behavior* (Elsevier Ltd. 2007), <http://icouzin.princeton.edu/wp-content/uploads/file/PDFs/Dyer%20et%20al,%202008.pdf> (accessed 1 August 2012); see also, Robert B. Cialdini, *Influence: The Psychology of Persuasion*, (HarperCollins Publishers, 2007).

composition, from its organization to its dispersion. Unfortunately, the military's definition of the crowd still relies on the twentieth century understanding. Basing its security practices on the effects of a "fight-or-flight" mentality on a crowd's dynamics, the military interprets social behavior of a crowd as a 'them-against-us' scenario where individuals within a crowd act freely, without hesitation or reservation.¹⁹

In 2007, scientists at the University of Leeds further deconstructed the causal effects of the herd mentality and the effects of the crowd, examining why humans subconsciously follow a minority of individuals, like flocks of sheep. According to their research, while still maintaining individual cognition, a minority can influence a majority's action without the minority realizing it.²⁰ The study determined that one particular influence is the virtual domain, offered via social media, the evolution of technology, and the pervasiveness of the modern communications technology. The impact of crowds from 2010 to present continues to generate interest amongst a small group of military practitioners, however it has yet to permeate contemporary military doctrine.

The Evolution of Social Media

Social networks like Facebook, Twitter, and YouTube are seizing popular media and academic attention. Accompanying their public popularity is a significant amount of marketing research and academic scrutiny. Most literature concerning social media specifically relates to marketing potential and communication strategies. In 2008, Danah Boyd and Nicole Ellison provided insight into the evolution of social media, explaining that *SixDegrees* was chronologically the first social network to appear in 1997 but disappeared in 2000. What made social network unique was not its ability to "allow individuals to meet strangers, but rather that

¹⁹Headquarters, Department of the Army, FM 3-19.15, 1-6.

²⁰Nauert.

they enable users to articulate and make visible their social networks.”²¹ As a result, social networking generated “latent ties,” forming connections between individuals that would not otherwise be made in an offline connection.²²

In 2002, the commonly accepted definition of a social media defined system is a web-based service that enables users to connect with one another and build public or private communications networks with shared relationships.²³ By 2002, the construction of social network sites surged; which led to Facebook in 2004 and Twitter in 2006. Since their introduction, social networking sites have increasingly grown in popularity. The majority of literature on social media and social networking centers on its exploitability for marketing purposes.²⁴ Reaching the mainstream public in 2003, social network sites continued to increase their membership. In 2009, Facebook had nearly 200 million users worldwide, exceeding 400 million users by 2010. Currently, the United States accounts for only twenty-six percent of Facebook users and forty-four percent of Twitter members. At the end of 2012, Europe led the world in Facebook users, followed closely by the United States and Asia. In comparison the global penetration of the Internet and potential of continued growth of social networking sites are evident with Asia leading at forty-five percent, followed by Europe at twenty-two percent and

²¹Danah M. Boyd and Nicole B. Ellison, “Social Network Sites: Definition, History and Scholarship,” *Journal of Computer-Mediated Communication*, 13(1), article 11. <http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html> (accessed 9 August 2012).

²²C. Haythornthwaite, “Social networks and Internet connectivity effects,” *Information, Communication, & Society* (2005): 125-147.

²³Boyd and Ellison, 210-230.

²⁴Examples of such work include: Warren Whitlock, and Deborah Micek, *Twitter Revolution: How Social Media and Mobile Marketing is Changing the Way We Do Business & Market Online* (Las Vegas, NV: Xeno Press, 2008); see also, Steve Holzner, *Facebook Marketing: Leverage Social Media to Grow Your Business* (Indianapolis, IN: Que Publishing, 2008) and Clara Shih, *The Facebook Era: Tapping Online Social Networks to Build Better Products, Reach New Audiences, and Sell More* (Boston, MA: Prentice Hall, 2009).

North America at eleven percent.²⁵ The penetration of the Internet and social media demonstrates a worldwide phenomenon, touching nearly every country to some extent or another.²⁶

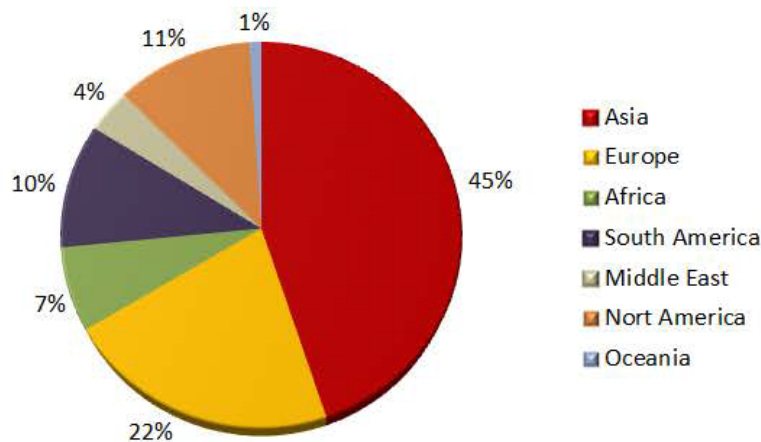


Figure 3. Internet Users in the World as of 2012, By Region.

Source: Created by author, using data from the World Telecommunications /ICT Indicators Database, International telecommunications World Database, and the World Bank.

The accepted definition of social media is an interactive instrument for communication, similar in part to the conventional use of the newspaper or a call into a radio station. Social media not only gives these users the ability to receive information, but also to transmit and share information instantaneously. Unlike a newspaper syndicate or mass media station, whose information must be factual, social media does not subscribe to the same terms and standards. While there are exceptions to every rule, and formal media outlets may sway more toward either a liberal or conservative slant, the accuracy of what they release determines their reputation and credibility. In the United States and most European countries, journalists subscribe to a code of ethics. While this code may vary between countries, there is consistency. According to the

²⁵Penetration corresponds to the ratio of users in relation to the total number of estimated population in each world region, expressed as a percentage.

²⁶Reference World Telecommunication/ICT Indicators Database, International Telecommunications World Database, and The World Bank Database.

International Federation of Journalists, journalists strive to serve the public with thoroughness and honesty in their reporting.²⁷ Due to the pervasiveness of the Internet, the sheer number of sites, and anonymity offered by social networking, the standards of traditional news and information agencies are not applicably recognized across the spectrum of social media sites. In addition to the uncensored releaseability of information, the interaction that social media affords further allows opinion to be mixed with truths, half-truths, or built-up fallacies. Social media allows anyone with access to express their thoughts on a particular subject and share it either with a target audience or to the masses. Many social media sites are meant to be opinion based, not news sites, however the distinguishability between opinion and fact can get blurred when public officials, heads of state, and respected members of the community begin to use social media to voice their concerns.²⁸ Social media allows a range of experiences for its user, from voting on an article to posting a review and recommendation on a movie just watched.

Social networking widens the audience of information consumption and expands information distribution with near-real-time effectiveness. Social networking sites, such as Facebook, allow subscribers to interact with other subscribers through chat, posting comments and pictures, opening group discussions, or by promoting external organizations. Social photo and video sharing are highly influential in shaping popular cognition. Sites like Flickr and YouTube allow the posting of photos, videos, and comments for public consumption and

²⁷“The International Federation of Journalists representing more than 450,000 journalists in over 100 countries, believes that professional journalists, organized in free and independent trade unions, play a key role in the creation and maintenance of a democratic media culture,” <http://www.ifj.org/en/articles/status-of-journalists-and-journalism-ethics-ifj-principles> (accessed 10 October 2012).

²⁸Social media is not the same as social news. While a social news site can broadcast across a social media site, the two are exclusively different as illustrated by the code of ethics held by professional journalists. Unfortunately, the broader category that is social media combines authentic journalism with social networking, propaganda, marketing schemes, and wikis. Some popular examples of interactive social media sites include Social Bookmarking, Social News, Social Networking, Social Photo and Video Sharing, and Wikis. One the key characteristic of social media is its interactive capability, such as allowing readers to vote on and share articles; some sites even allow readers to comment on articles.

socialization.²⁹ Then there are the Wiki sites, which allow users to create, post, update, and edit existing articles. Wiki sites serve as a form of digital encyclopedia, minus the trusted, standardization, and lexical information. The technology that drives social media can also take on various other forms, such as weblogs, social blogs, and podcasts. While terminology and applications continue to grow, the inherent capability that social media offers remains consistent. Social media allows reach, from small-targeted groups to a global audience. Social media allows for instantaneous interaction. While interaction between conventional forms of media could take days, weeks, or months, social media presents a form of immediate interface. Social media is accessible to anyone with the means to wield a cellphone or visit an Internet café. Social media sites are accessible from the comfort and security of an individual's home or the anomalously from a public square. Technology continues to permeate society, reducing the cost of mobile media devices, while the convenience and accessibility of social media increases. Furthermore, interacting with social media sites requires only familiarity with the Internet, making it non-age or degree specific. Lastly, history demonstrates that social media is fleeting. As demonstrated by Wiki, any user can alter its content or context by editing or commenting on the site.

Crowd Theory and Social Media

Since the 1990s, United States military doctrine has sought to address the dilemma of the crowd in the context of the operational environment, by distributing the responsibility of responding to civil unrest across the various functions of the military battlefield operating systems. Using scientific study and independent research to leverage a better understanding of the operational environment, the military continues to expand its approach to addressing the problem

²⁹Merriam Webster, <http://www.merriam-webster.com/medical/socialization>, (accessed 7 November 2012). Socialization is the process by which an individual learns how to interact with others and becomes a member of society. According to Merriam Webster: it is “the process by which a human being beginning at infancy acquires the habits, beliefs, and accumulated knowledge of society through education and training for adult status.”

set, but not its complexity. The military's solution is to address the problem set distinctively through military police functions, intelligence collections, and public affairs operations; approaching the dilemma of the crowd and the influence of social media as a battlefield consideration vice decisive engagement or form of warfare.

Similarly Field Manual (FM) 3-13, *Information Operations*, and FM 2-22.9, *Open Source Intelligence Operations*, FM 3-24 *Counterinsurgency Operations*, recognize the impact of the media and influence of propaganda across all levels of the military, attributing these phenomena to the overwhelming access to technology that generates near real-time access to information as it unfolds. Conceding that media has a direct influence on the attitudes of its audience, doctrine accepts that there exists "a war of perceptions between insurgents and counterinsurgents conducted continuously using the news media."³⁰

Several military leaders have sought to address the dynamics of the crowd in the operational environment and the relevant impact of social media based on their particular lines of operation. Limited to op-ed articles inconsistently across military journals and independent publishing sources, their combined efforts have not gained traction in influencing military discourse. Less publicized and acknowledged in the military's realm of academia, Lieutenant Colonel Brian Petit's 2011 *Unconventional Warfare Meet Social Media* serves as the best current synopsis of the relationship between the crowd and social media, and its impact on current operations. While some military sponsored publications work toward addressing the influence of technology on the operational environment, they continue to examine the phenomena as an isolated issue. Written by the Office of Public Affairs in 2011, the *Social Media Handbook* ventured to address the growing influence of social media within society and the military: "When

³⁰Headquarters, Department of the Army, FM 3-24, 3-23, 5-10.

breaking news happens, one of the first places they [the public] turn is social media.”³¹ Within its discussion, the handbook stresses the primacy of social media as a mechanism for instantaneous, worldwide, information dissemination. The publication focuses primarily on the adaptation of social media within military practices to establish a unit’s credibility, accessibility, and authenticity. With respect to operation applications beyond public affairs operations, the handbook offers several contemporary examples of Army leaders effectively using social media to manage crisis operations.³² Aimed at demonstrating the positive consequences of engaging with the media and magnitude of the media’s influence on the operational environment, the handbook barely scratches the surface of the fundamental challenges posed by social media and social networking. Highlighting the significance of social media’s influence in the operational environment, commanders are encouraged to promote an organizational social media presence and take advantage of the media’s presence, using platforms such as press releases and email.³³ There is a great discrepancy between the Army Field Manuals’ approach to crowd and social media management. While some sources advocate a passive-aggressive approach targeting the population, using capabilities rooted within civil-military affairs and information operations, others focus on a direct approach via lethal and non-lethal targeting and response tactics.

While crowds have the propensity to become violent, violence does not uniquely distinguish one crowd formation from another. Even in situations where a crowd assembles for non-violent reasons, violent and extreme tendencies are easily perpetuated and prevailing.

³¹Headquarters, Department of the Army, Online and Social Media Division, *The United States Army Social Media Handbook, Version 2* (Washington, DC: Government Printing Office, 2011), II.

³²Ibid., 8. During crisis management situations, the office of public affairs encourages the use of social media as a tool to communicate with key audiences, due to the speed, reach and convenience of social media applications. Two examples, where this communications outreach proved effective include the 2011 Fort Bragg tornado and the 2011 Japan Tsunami response and recovery operations. In both cases, the United States Army successfully used social media to provide essential information in a period of crisis.

³³Ibid.

Nefarious actions of a crowd constitute one of several intermediate phases a crowd may experience. Recent studies show that crowds are more of a process than a homogeneous entity by design. A crowd in being has a beginning, middle, and end. Composed of clusters of similar individuals, a crowd can have motivations that are inconsistent and can vary. At the micro-level, these clusters operate in unison, such as assembling and dispersing in concert. At the macro-level, these actions in concert give the appearance of harmonious action.

Crowds assemble for specific purposes, such as action or observation. Both historical examination and contemporary research show that crowds organize around central persons of authority, information, and influence. Evidence also shows that random individuals are self-organizing and capable of making consensus decision; yet, as the number of crowd participants increases, the number of informed/authoritative individuals decreases.³⁴ Social media serves as more than just a platform for organizing and constructing a crowd's composition; social media has the power to shape the crowd's perceptions and recognition of the facts. Once formed, social media has the ability to direct a crowd's energy, sustain its existence, and influence its dissolution. The more integrated social media is into the process of a crowd's composition, the faster the crowd will mature through its phases, making it more susceptible to reactions based on fervor. As many social scientists argue, in intense and complex crowd formations, the individual will begin to lose sight of the situation's reality, susceptible to negative suggestions, propaganda, and irrational emotions.³⁵ This is not always the case, however, as highlighted in the recent analysis of the 2011 London Riots when social media demonstrated the ability to generate a positive influence on the crowd's recourse.

³⁴Nauert, 20-23.

³⁵Dyer, et al.

Contrary to historical interpretation, recent studies conclude that crowd participants do not generally assume a sense of anonymity.³⁶ While the behavioral phenomenon coined as the “herd mentality” does play a major role in determining the outcome of a crowd’s disposition, research shows that the collective identity of the crowd will not cripple individual cognition. Consequently, the “herd mentality” serves as the mechanism responsible for shaping a crowd’s collective identity, based on the ability for a minority to influence the decision-making and actions of the majority.³⁷ Scientific research concludes that a minority of five percent has the ability to influence a crowd’s direction, unbeknownst to the remaining ninety-five percent.³⁸ In the contemporary operational environment, social media is the driving mechanism enhancing the influence of the “herd mentality” phenomena, affecting each phase stage of a crowd’s composition, from its organization to its dispersion.

Case Studies: Social Media’s Influence on Crowd Behavior and Response Measures

Social media decreases the time it takes for information to spread and widening the audience to which information is accessible. Consequentially, social media has become one of the most influential factors in shaping a crowd and influencing the operational environment. When assembled, a crowd has the tendency to take on specific characteristics because of certain physiological phenomena. These phenomena vary to certain degrees based upon the context of the crowd and the reason for the assembly. Throughout history, crowds have played a monumental role in shaping society and subsequently influencing military action. Some of the

³⁶Kenny, et al., 20-23.

³⁷Nauert. In a 2007 study, by Scientists at the University of Leeds, the herd mentality surfaced as the contemporary explanation for why humans flock like sheep and birds, subconsciously following a minority of individuals.” Dubbed as the “herd” mentality, this term encompasses a behavioral phenomenon that is consistent among several species.

³⁸Nauert; Dyer, et al.; see also, Robert B. Cialdini, *Influence: The Psychology of Persuasion*. (HarperCollins, 2007).

most significant crowds in history include uprisings that resulted in the French Revolution and the rise of the French Republic, echoing as a symbol for change across Russian and China, and the Arab Spring, resulting in regime changes in Tunisia, Egypt, Libya, and Yemen, spilling over into social reform movements in Bahrain and Iran. Demonstrating just as much potent fervor, crowds in South Korea, the United States, and England have influenced the discourse of politics and policy.

The evolution of social media has decisively altered the relationship between society, politics, and military conduct. By providing near real-time coverage of events, social media enables the generation of multiple and sequential social movements, causing governments and security forces to reply with similar swiftness and accord, without generating further negative repercussions. Recognizing the influence of the social media within an urban setting is a component in understanding the nature of the operational environment. While doctrine dictates methods for exploiting social media as a means for responding to situations of social unrest, real world examples will illustrate that the complexity afforded by social media requires more than reactionary public affairs response techniques. As demonstrated in the case studies to follow, individual actions and perception can directly influence operational and strategic level operations, and if left unchecked can create a cascade effect of negative consequences.

Revolutions and the Arab Spring

As demonstrated in France during the 1789 Revolution and again in the Middle East in both the twentieth and twenty-first centuries, the weight of social fervor serves as a powerful mechanism responsible for changing the course of war and warfare. During the French Revolution, the social and military dynamics changed: wars once fought by kings over territory and power morphed into progressive wars over social progress and human rights. The French Revolution marked a significant shift in the purpose of war, as the society sought to establish

liberty, equality, and thwart oppression. Although the lines between progress and humanity are often blurred, humanitarian rhetoric and ideology significantly influence states' politics and military action. The introduction of the Declaration of the Rights of Man and Citizens, and the dethroning of the aristocracy, resulted in a new social culture.³⁹ This social upheaval, spurred by printed media and public forums, created a dramatic shift in the country's political culture and subsequently redefined the purpose of the nation's military. Across Europe and into the Middle East, Woodrow Wilson's *Fourteen Points* incited similar revolution, known as the Arab Spring of 1919.⁴⁰ What followed became a transnational movement that drew its momentum from the promise of national independence and self-determination, via waves of public demonstrations and social outcry. Mirroring the fundamental causes of the 1919 Arab Spring, the 2010 Arab Spring spurred popular movements across the Arab world. The result of both movements witnessed the fall of governments and the drastic realignment of military regimes. While Wilson's 1918 speech circulated via telegraph, modern-day media and cyberspace facilitate similar social unrest and call to arms. The contemporary equivalent of 1919 mass media includes social-network forums, blog and tweeter sites, information aggregators, wikis, and various forums for video sharing. The 1919 Arab Spring manifested eight months after Wilson's *Fourteen Points*, whereas the 2010 Arab Spring flourished within hours of local stimulus, transcending international borders within days. The 2010 Arab Spring demonstrated how the collective influence of these mass media forums produced a volatile and unstable crowd, which led to mass demonstrations, riots, and social change. The impact of this social media led to a revolution that altered more than just the region's

³⁹Peter Paret, Gordon Alexander Craig, Felix Gilbert, *Makers of Modern Strategy: From Machiavelli to the Nuclear Age* (Princeton, NJ: Princeton University Press, 1986), 142-144.

⁴⁰Lisa Anderson, "Demystifying the Arab Spring," *Foreign Affairs* 90, no. 3 (2011): 10-13; see also, George B. Tindall and Davis E. Shi, *America* (New York and London: Norton Publishing, 1989), 643-44.

social, political, and military dynamics, it subsequently altered how the world viewed the North African and Middle Eastern nations.

Prior to 2010, several countries recognized the potential threat of social media and its ability to lead to unruly crowds and civil unrest. One such country was Dubai, claiming that social media conveys information that is inconsistent with the moral, religious, and political values of the country.⁴¹ Dubai's social media ban followed in direct response to the international pressures they received from their arrest of a University of California in Berkeley student. In 2008, James Buckely used his cell phone to text via Twitter information about his arrest to his followers stateside, who contacted the American Embassy and the University at Berkeley. Within twenty-four hours of Buckely's "Tweet," the embassy secured his release.⁴² In 2008, Twitter was a social network service, used primarily by journalists and bloggers as a mobile wire service. Today Twitter is a tool used worldwide for social networking, as well as for commercial, personal, and professional use. Buckely's negotiated release demonstrated the potency of social media's ability to bring about change, rally and gather support. This incident awakened many governments to the lethality of this capability, as a vehicle for influencing international intervention in regional matters.

The 2011 Arab Spring resulted from an incident on 17 December 2010, wherein a Tunisian street vendor committed suicide out of frustration over the state of political, economic, and social affairs.⁴³ Following this very public and dramatic death, several of the deceased family

⁴¹Nilufer Panthaky, "Twitter Banned In Dubai," *AccuraCast Digital Media News*, 22 April 2008, <http://news accuracast.com/blogs-7471/twitter-banned-in-dubai/#ixzz28vd9Hqys> (accessed 23 August 2012).

⁴²Mallory Simon, "Student 'Twitters' his way out of Egyptian jail," *Cable News Network*, 25 April 2008, <http://www.cnn.com/2008/TECH/04/25/twitter.buck/index.html?iref=allsearch> (accessed 23 August 2012).

⁴³Yasmine Ryan, "How Tunisia's revolution began," *Aljazeera*, <http://www.aljazeera.com/indepth/features/2011/01/2011126121815985483.html> (accessed 15 August 2012). Unable to find a job, a Tunisian named Mohamed Bouaziz took to the streets to peddle fruits and vegetables as a means to

members and local townsmen joined in protest against the government. As cell phone video recorded the clashes between the protestors and security forces that ensued, participants used social media applications to disseminate the coverage across the Internet to the international world. As awareness spread, crowds increased in numbers and expanded to areas outside the capital city. Less than fifteen days after the vendor's suicide Tunisia's united in revolution. Social media applications such as Twitter further enabled spontaneous assemblies, eventually gaining international awareness and coverage via traditional media outlets. As a result, what became known as the Jasmine Revolution, forced Tunisia President Zine el-Abidine Ben Ali into exile, ending a twenty-three year regime, and in less than a year leading democratization and free elections.⁴⁴ Not only did Facebook and Twitter serve as the vehicle to organize the crowds to form in protest, its users engineered and organized a revolution across the country, mitigating the government's attempts to control its publicity and popularity. Using social media as a vehicle to fill the crowd's leadership vacuum, the crowds self-organized to generate and sustain momentum for their common cause. Tunisia's rapid progression from civil unrest, to violence, and revolution demonstrated the consequences of social media and its influence on the crowd. Not only did these events cause regional upheaval, they generated an international uproar of public opinion, fueled by digital interface, and subsequently giving rise to civil war and violence across multiple borders.

News of the Jasmine Revolution spread generated overwhelming public interest, inspiring revolutions across region into Egypt, Libya, Syria and Bahrain.⁴⁵ Public awareness

generate income. However, the lack of a permit caused local law enforcement to shut him down. This humiliation and despair drove Bouaziz to set himself on fire, to protest against the government's repression.

⁴⁴Wyre Davies, "Tunisia: President Zine al-Abidine Ben Ali forced out," *British Broadcasting News*, 15 December 2010, <http://www.bbc.co.uk/news/world-africa-12195025> (accessed 15 August 2012).

⁴⁵Across the Middle East and North Africa, the collective nature of the Arab Spring resulted from tensions over an international financial crisis that spread across multiple continents, a rise in food prices

manifested into public outrage as social-media coverage exponentially increased. As social networks and awareness grew, “a decentralized community of web-based activists rapidly coalesced into politically powerful, loosely organized insurgents who produced not just riots, but astonishing revolutionary change.”⁴⁶ Commonly referred to as the Twitter Revolution, the Arab Spring demonstrated the collaborative power of social networking relationships. Within thirty days, the Jasmine Revolution inspired similar revolutions across neighboring continents. Spreading images and individual sentiments instantaneously locally, regionally, and across the globe inspired strangers to unite and rally around the need for change. The revolution demonstrated the ability of social media to overcome the obstacles of time and space by orchestrating multiple near simultaneous and sequential social movements. The effects of the social media phenomena spread, inciting fervor among a range of religious ideologies and social classes, from developed nations to weak and failing states. Unvetted media sources distributed compelling images and stories that resonated with all classes of citizens, worldwide, inspiring a mix of activism and outrage that ignited revolutionary sentiment. The 2010-2011 Arab Spring illustrated the overwhelming influence of social media on influencing a crowd’s behavior, bringing to light a new battlefield dynamic, capable of shaping and expanding the scope of the operational environment beyond traditional conception. The consequences of the Arab Spring highlight the positive and negative attributes of the cyber domain. Unlike revolutions of the past, the Arab Spring confirmed the pervasive qualities of the Internet and technology; representing a

and a decline in food subsidies, increased unemployment, and continued tensions between the have and have-nots. These issues codified at the local level, giving way to the perfect storm. Demographical tensions, coupled with the counterweight of technology over authoritative oppression over free speech and freedom of expression, generated unique circumstances and movements toward change. While some protests proved to be non-violent, other crowd formations varied in violence, due to the actions of either protestors or responding security forces.

⁴⁶Petit. See also Jack A. Gladstone, “Understanding the Revolutions of 2011,” *Foreign Policy* Vol 90 no. 3 (2011): 8-16.

significant threat to a state's power, serving not only as an environmental factor, but also as an unconventional cyber-based weapon system.

In hindsight, the indicators leading to the Arab Spring are extensive and clear. Technology enabled the revolutionary sentiment to spread, inspiring a flurry of activism among socially strained societies. Technology offered the means to incite social concern and increase awareness, to generate public support, to organize, coordinate and form resistances and to develop momentum. Social media served as the vehicle for collaboration and the exploitation of social fervor. As anger and resentment grew, social media offered individuals a means of participating from a physically safe area, in a semi-anonymous role. "The pervasive and resilient character of web-based social media enabled rapid social organization that circumvented regimes and inspired bold and effective acts of resistance."⁴⁷ The events that unfolded demonstrated the ability for social media and social networking to manage social discourse, tactics, and momentum with near real time precision. The magnitude of these events collectively demonstrates the resilient nature of social media forums against traditional state sponsored civil disturbance countermeasures. Over two years later, the impact of the Twitter Revolution continues to resonate across international datelines and ideological boundaries of the Arab nations.

Libya

In Libya, during the Twitter Revolution, social media applications documented and relayed accounts of security forces reacting with extreme violence toward anti-regime protestors, killing many indiscriminately. The effects of which generated an international response by the North Atlantic Treaty Organization (NATO). What initially began as an arms embargo against Libya, morphed into Operation UNIFIED PROTECTOR. On 31 March 2011, under United

⁴⁷Petit.

Nations Security Council Resolutions 1970 and 1973, Operation UNIFIED PROTECTOR sought to protect civilians and civilian-populated areas under attack or threat of attack.⁴⁸ The events that unfolded in Libya demonstrated the overwhelming impact of social media on politics and international policy, further illustrating the domino effect of social media on the operational environment. Unlike elsewhere in the region, Libya drew an international military response in response to perceived injustices executed by regional authorities.

What began on 16 February 2011 with hundreds of anti-government protesters gathering to condemn the arrest of a human rights campaigner, within 24 hours generated hostile response with Benghazi police. Awareness spread of the clash spread and within 48 hours, both pro-government and anti-government protests erupted across the country. By 20 February, nearly 230 resulted from what the media deemed as the “the most violent scenes so far of the wave of unrest sweeping the Arab world.”⁴⁹ Six days later, the United Nations Security Council voted to impose travel and asset sanctions on President Gaddafi, to include imposing an arms embargo and referring Gaddafi to the international criminal court. Escalation of the events continued, resulting in Operation UNIFIED PROTECTOR. Fueled by images and personal accounts of humans’ rights atrocities across social media sites, the civil war in Libya transformed into a massive international project, resulting in a complete regime change less than seven months later. In Libya, social media not only served as a lead mechanism for inciting and organizing anti-government support, it sustained the crowd’s momentum and fueled its fervor through the posting of graphic images and generating international support and resources. Social media broadened the

⁴⁸Headquarters North Atlantic Treaty Organization, “Allied Joint Force Command Naples, Operational Media Update: Libya and NATO,” 25 October 2011, http://www.nato.int/cps/en/SID-C1AF62EF-DC75EED5/natolive/news_71994.htm (accessed 9 October 2012).

⁴⁹Ian Black, “Libya on brink as protests hit Tripoli,” *The Guardian*, <http://www.guardian.co.uk/world/2011/feb/20/libya-defiant-protesters-feared-dead> (accessed October 9, 2012); see also, “Libyan protesters clash with police in Benghazi,” <http://www.guardian.co.uk/world/2011/feb/16/libyan-protesters-clash-with-police> (accessed 9 October 2012).

scope of the civil war into an international crisis, typing the scales with overwhelming intervention. The Libyan rebels' ability to generate massive crowds, overwhelming transnational support, and incite regime change motivated near simultaneous uprisings across the region. As protests spread into Bahrain, Syria, Egypt, and Iran, government factions and the international community proved to respond very differently.

Egypt

In Egypt on 25 January 2011, crowds gathered to protest unemployment and corruption. The initial outcry over injustices in government via social media forums, led to two weeks of political turmoil and mob fighting. While initial clashes between security forces and the demonstrators caused several Egyptians their lives, the negative press and documentation of the atrocities caused by the Egyptian authorities led to the Egyptian government's eventual non-violent approach toward controlling the crowds. Described as the Facebook and Twitter Revolution, the result of the social media led and organized protests resulted in the removal of Egyptian President Mubarak from power and the democratic elections that would bring to power the Islamic Brotherhood. In less than twenty days, social media and the influence of the crowd brought about a complete regime change, and international praise for their democratic practices.

The power of the Internet, the real power of social media is in helping accelerate the time frame of revolution. Information spreads faster, activities are organized and coordinated effectively, [and] larger audiences are reached via the Internet.⁵⁰

In 2011, the Internet penetrated over fifty-seven percent of the Egyptian population, with nearly twenty percent of its population associated with Facebook.⁵¹ Facebook and Twitter

⁵⁰“You Say You Want a Revolution,” *Bismarck Tribune*, February 07, 2011. <http://search.proquest.com/docview/849570659?accountid=28992> (accessed 15 August 2012); see also George Saghir, “The Facts Behind Future Middle East Instability,” *The International Economy* (Winter 2011): 63-65.

⁵¹International Telecommunication Union Database, <http://www.itu.int/ITU-D/ict/> (accessed 3 January 2013).

allowed a semi-coordinated assembly of educated youth and people of varying ideologies to gather and protest their collective agenda. Protesting the doctoral government, the crowd's demographics ranged from Islamist, to Communist, and Secularists.⁵² Focused on seeking a form of democratic, economic, and social change, those responsible for generating the crowds used social media to target the Internet generation and organize a non-violent assembly. Social media enabled protestors to organize and to promote a positive and secure environment. Protestors organized to police themselves, conducting security checks, and cleaning up the assembly areas following an event. The momentum of the crowds in Egypt outweighed the efforts of traditional law enforcement, generating the need for the government to call the military to intervene. Social media increased the speed at which information traveled, expediting communications between lobbying groups, while circumventing state sponsored censorship. In an unsuccessful effort to counter the large formations of crowds and to block the sites used to generate propaganda, the Egyptian government attempted to turn off the Internet services. Yet, users still maintained the access to international Twitter applications, partial mobile phone service remained, and with the assistance of external supporters, video and photo uplinked continued to propagate external social media sites. One of the many international responses, resulted in Google providing a local Egyptian number, wherein Egyptians could call or tweet their comments on the uprising and relay near real-time accounts of the situation. Despite the government's efforts, the momentum generated by the social media phenomena had already met its objective and where it had not, social networking applications enabled users to circumvent the government's obstacles.⁵³

⁵²Nilufer Panthaky, "Social Media Used to Fuel Civil Unrest in Egypt," *Accuracast News*, 31 January 2011, <http://news accuracast.com/news-7471/social-media-used-to-fuel-civil-unrest-in-egypt> (accessed 23 August 2012).

⁵³Once organized, social media was not alone in motivating the crowds and influencing their size; traditional media sources and word of mouth played a vital role in keeping-up the momentum and igniting international interest.

Iran

The Iranian government thwarted an uprising similar to that in Tunisia in 2010 by instituting strict government oversight over their Internet, restricting access and flooding social media sites with pro-government propaganda. In December 2009, a small group of anti-government protestors gathered in Tehran to protest the disputed presidential elections. During the course of events, a young bystander by the name of Neda Agha died because of a single shot from security forces. Cell phone video captured her final moments and the footage instantaneously went viral across the Internet, linked through Facebook, Twitter, YouTube and other social networking sites.⁵⁴ The images sparked international outrage and full scale traditional media coverage. What followed initiated a debate about the regime's commitment to human rights standards, drawing international attention on a regional issue. In February 2011, social media again aided in the organization of anti-regime rallies: inspired by the success of similar movements in Tunisia and Egypt, the virtual opposition manifested into large-scale protests. Initially the opposition focused its efforts towards "digital activism," using the cyber domain to replace physically protesting in a public venue.⁵⁵ Digital activism presents several risks, not only to the organization it is in opposition to, but also towards its own cause. As a safe, non-violent mechanism to release negative energy and frustration, its efforts are contained to the digital world. While this can physically safeguard human lives and physical property, the lack of external media coverage may make large-scale movements harder to identify.⁵⁶ The combined

⁵⁴Jim Sciutto and Bruno Roerber, "Iranian Opposition Reeling Under Pressure of Crackdown," *American Broadcasting, World News*, 21 June 2010, <http://abcnews.go.com/WN/inside-iran-underground-opposition-year-deadly-protest/story?id=10953946> (accessed 23 August 2012).

⁵⁵Ramtin Amin, "The Empire Strikes Back: Social Media Uprisings and the Future of Cyber Activism," *Kennedy School Review* 10 (September 2009): 64-66, <http://search.proquest.com/docview/910300170?accountid=28992> (accessed 15 August 2012).

⁵⁶James Carafano, "Successful Revolution Takes More than Social Media," *The Examiner*, 22 February 2011, <http://search.proquest.com/docview/853592983?accountid=28992>.

efforts of digital activism and physical resistance, demonstrated the potency of the crowd, in either form. With physical crowds numbering in the tens of thousands, the government responded by deploying security forces to disperse the crowds. Government censorship and the extreme violence levied by security forces caused the social movement to lose traction by March of that same year.

Iran's response to the permeation of social media and the threat of digital activism resulted in increased censorship of traditional news sources, such as newspapers and television; blocked access to social networking sites, such as YouTube and Twitter; and the posting of false information about gatherings to entrap protestors. One of the government's most successful responses toward digital activism generated was what many journalists classify as 'Spinternet.' Unable to effectively monitor, block, or control the abundance of social media sites available, the Iranian government focused on making these Internet applications even more unreliable, by posting several pro-government updates and fake Twitter announcements, and pushing overwhelming amounts of propaganda.⁵⁷ Targeting specifically the Western audiences, the government replaced censorship with propaganda, and in turn used the sites to gather intelligence against its opposition. Standing up a cyber-army, under the direction of the Iranian Revolutionary Corps, the government sought to further push its propaganda across the Internet, collect information on and imprison anti-government activists, and hack into international websites, as demonstrated by an attack against the Voice of America Internet site in February 2011.⁵⁸

⁵⁷ Evgeny Morozov, "Iran's propaganda hits the 'Spinternet,'" *Cable News Network*, 29 December 2009, <http://www.cnn.com/2009/OPINION/12/29/morozov.dicatorships.internet/index.html?iref=allsearch> (accessed 11 October 2012).

⁵⁸ *Cable News Network*, "Voice of America internet site hacked by Iranians," 22 February 2011, <http://www.cnn.com/2011/WORLD/meast/02/22/iran.voa.hacking/index.html?iref=allsearch> (accessed 11 October 2012).

England

The London Riots of 2011 demonstrated the usefulness of social media as a tool for constructive and peaceful civil action. Following the London Riots, research from the Telecom ParisTech and the University of Greenwich found that social media could serve as more than just a vehicle to organize civil unrest into crowds and demonstrations; social media also has the potential to calm civil unrest and thwart violent acts. The study concludes that if law enforcement responded by restricting access to social media, the consequences would have been more violent than what actually took place. Evidence argued that no censorship had better outcomes than moderate censorship.⁵⁹ Other studies and analysis argue this point further, claiming that Twitter aided in the actual clean-up of the city and that social media served more as a vehicle to condemn the riots than fuel them. Examining over 2.6 million riot tweets, the study found that the majority of social media activity focused on positive resolutions to the violence and data mining on the latest information on the unrest. Based on the 270 rioters interviewed, the study found that as the crowds turned violent, the majority of nefarious communications transpired between private messaging networks and personal mobile devices.⁶⁰ This dynamic is an important factor in understanding the role of social media and its potential integration into military applications, as it pertains to intelligence collection and information operations deconstruction of the threats imposed by the formation of a crowd and civil unrest.

⁵⁹Antonio A. Casilli and Paola Tubaro, Bulletin of Sociological Methodology, *Social Media Censorship in Times of Political Unrest - A Social Simulation Experiment with the UK Riots*, 2 July 2012. http://www.sagepub.com/press/2012/july/SAGE_CensoringSocialMediaFansFlamesSocialUnrest.sp (accessed 11 October 2012).

⁶⁰James Ball and Paul Lewis, "Reading the Riots: The Politicians and Police Rushed in to Condemn. Twitter Helped Clean Up: Analysis of Riot-Related Tweets Dispels Myth of Site as Vehicle for Social Unrest," *The Guardian*, (8 December 2011): 14, <http://search.proquest.com/docview/909467436?accountid=28992> (accessed 15 August 2012).

South Korea

In South Korea, social media has become a powerful tool for political discourse and social enterprise, changing the course of domestic policy and individual freedoms. Estimates claim that South Korea has over fifty million mobile phone users. More than sixty percent of the population has smartphones; as a whole, there are more phones in use than there are people.⁶¹ This is a dramatic increase from the approximate 43 million users in 2007.⁶² Today in South Korea, free wireless networks are common in almost every public venue, as are the sales of innovative technology. The rapid proliferation of social media presents similar challenges in Asia as experienced across North Africa and the Middle East. In 2007-2008, social media helped Lee Myung Bak achieve his presidential victory and lead to his fall from favor, within a period of five months. What started in 2008, two months into Bak's presidency, as frustration over international trade agreements, grew to dominate the countries popular social media discussion boards, leading to organized opposition and major demonstrations across South Korea's major cities. Mass protests in the capital city of Seoul advocated against the import of beef from the United States, claiming Bak's international policy was risking the health of its citizens. Analysis of the events that followed demonstrated that the majority of the protestors were protesting false information, disseminated by social networking sites and fueling civil unrest. As a result, the Korean government designed regulations against Internet users, in an attempt to control content and void

⁶¹Rory Lidstone, "Smartphone Users Pass the 30 Million Mark in South Korea," *Mobility Techzone* (22 August 2012), <http://www.mobilitytechzone.com/viewette.aspx?viewette.aspx?u=http%3a%2f%2fwww.mobilitytechzone.com%2ftopics%2f4g-wirelessevolution%2farticles%2f2012%2f08%2f22%2f304266-smartphone-users-pass-30-million-mark-south-korea.htm> (accessed 23 August 2012). Comparatively, in the United States research shows that fifty eight percent of Americans use smartphones.

⁶²Central Intelligence Agency, Office of Public Affairs, *CIA World Fact Book: South Korea*, (Washington, DC: Government Printing Office) 12 September 2012, <https://www.cia.gov/library/publications/the-world-factbook/geos/ks.html> (accessed 10 October 2012).

against what it termed as “infodemics.”⁶³ In an effort to impose measures designed to improve security and reduce the spread of erroneous information and propaganda the Korean government established strict rules governing internal Internet portals; for example, requiring social media sites to use the actual names of those individuals posting comments. While the Korean Communications Commission claims its Cyber Defamation Law focuses on protecting privacy and preventing the illegal use of personal information in cyberspace; many South Koreans view their government’s efforts as a means to erode their individual freedoms.⁶⁴

India

Recognizing the impact of social media on domestic stability in India the government decided to take a “gentlemen’s” approach to regulating social media content, attempting to avoid the escalation of events demonstrated across the Arab world. On 23 August 2012, the government of New Delhi issued strict guidelines for the use of social media networks. In an attempt to control the content of information posted, the government asked social media networks to refrain from posting unsubstantiated facts and confidential information.⁶⁵ According to New Delhi’s Information Technology Ministry, there are over 78 million mobile Internet subscribers and 16 million Twitter users in India. Across the country, social media represents a powerful platform for developing opinions as well as producing mass support. Recognizing this trend and in an attempt

⁶³“Seoul Tries to Set Standards for Internet Accuracy,” *International Herald Tribune*, 4 August 2008, <http://search.proquest.com/docview/318948131?accountid=28992> (accessed 15 August 2012).

⁶⁴“Growing Responsibility: Internet Portals Should Be More Accountable for Services,” *The Korean Times*, 19 August 2008, http://www.koreatimes.co.kr/www/news/opinon/2009/02/202_29634.html (accessed 24 August 2012). South Korea is the first democratic state to enact this law, modeling their law based off China’s version of this policy. The Cyber Defamation Law allows Korean law enforcement to take action against those individuals responsible for posting “hateful comments” about fellow citizens on the Internet. Police action would not require victims to submit a grievance or report.

⁶⁵“Government issues guidelines for its departments to use social media,” *The Times of India*, 23 August 2012, http://articles.timesofindia.indiatimes.com/2012-08-23/social-media/33341255_1_social-media-facebook-page-government-issues-guidelines (accessed 24 August 2012).

to prevent negative backlash from unpopular government policies, the government made a concerted effort to focus on its public image by restricting its employees use of social media. Advocating that a government employee must refrain making “personal comments for or against any individuals or agencies should not be made and professional discussions should not be politicized,” the government attempted to thwart scenarios similar to those experienced by the Arab world the year prior.⁶⁶ According to the government of New Delhi, these guidelines serve as a means to help its departments make positive use of social media and engage in meaningful discussion with its stakeholders. While the government claims its actions are aimed at protecting its citizens from misrepresenting themselves, many of its citizens claim that these guidelines are a just another means for stifling its critics.⁶⁷

The United States

The United States demonstrates a perfect storm for social media, military and political discourse. The legal and ethical debate continues within the United States on how to approach the social media phenomena, as security officials and public relations advocates continue to disagree on the practical application of social media. Meanwhile, the United States Government has a Facebook and Twitter profile that is open for public interface, as well as an internal social networking site designed to share best practices and experiences amongst a select audience. The United States Army, following the precedence of the United States Air Force, established a Cyber Command to conduct “cyberspace operations in support of full spectrum operations to ensure U.S./Allied freedom of action in cyberspace, and to deny the same to our adversaries.”⁶⁸ Law

⁶⁶Ibid.

⁶⁷Mark Magnier, “India limits social media after civil unrest,” *Los Angeles Times*, <http://articles.latimes.com/2012/aug/23/world/la-fg-india-twitter-20120824> (accessed 24 August 2012).

⁶⁸United States Cyber Command, United States Army Cyber Organization, <http://www.arcyber.army.mil/org-arcyber.html> (accessed 11 October 2012).

enforcement and city elected officials, meanwhile, are struggling to respond to the social media-generated flash mobs and riots. The summer of 2011 highlighted numerous social media-inspired crowd assemblies that transformed into riots, most notably in England and in several cities across the United States. As a result, debates continue on how to respond or thwart these events from reoccurring. In Cleveland, the city council unsuccessfully attempted to pass an ordinance to make it illegal to use social media to organize violent protests or mobs.⁶⁹ In the Bay Area, in response to large demonstrations on a subway platform, the Bay Area Rapid Transit District shut down cellphone service at the station. In a cascade of events and further outrage, more protests ensued shutting down several stations.⁷⁰ In Los Angeles, a 'disk jockey' tweeted to rally followers to congregate on Hollywood Boulevard; hundreds responded, resulting in a massive police presence to respond to the crowd, which turned from a flash mob to a full-scale riot.⁷¹

The 2011 Occupy Wall Street movement that captured the media's attention, from roughly June to November, originated as an anti-consumer movement protesting a variety of issues from socio-economic inequality, to greed, corruption and the perceived undue influence of conglomerate corporations on government.⁷² Using social media to publicize their initiatives, protestors organized sit-ins, sleep-overs, and full-scale occupations of public venues to demonstrate their resolve. Once organized, protestors used social media to generate financial support, entice traditional media coverage, and inspire similar movements across the nation.

⁶⁹The Cleveland City mayor eventually vetoed the measure, citing First Amendment concerns.

⁷⁰The social media organized demonstration, sought to protest a police shooting an armed assailant. Officials argued their efforts aimed at protecting the safety of subway riders, but critics claimed it violated their free-speech rights.

⁷¹Robert Faturechi and Andrew Blankstein, "Flash mobs, riots prompt debate about social media crackdown," *Los Angeles Times*, 16 August 2011, <http://latimesblogs.latimes.com/lanow/2011/08/flash-mobs-riots-prompt-debate-about-social-media-crackdown.html> (accessed 23 August 2012).

⁷²Robert Stolarik, "Occupy Movement (Occupy Wall Street), *The New York Times*, 12 September 2012, http://topics.nytimes.com/top/reference/timestopics/organizations/o/occupy_wall_street/index.html (accessed 23 October 2012).

Protestors used numerous social media applications to create virtual assemblies and conferences, as a means to collaborate and shape their strategies, build consensus on themes, and sustain the movement's momentum. By 13 October 2011, nearly 1,300 meetup groups formed in cities across the country, using the Occupy Together website as their virtual headquarters.⁷³ Six months after the movement began, after localized clashes with law enforcement, public support faltered; and with it public donations and political rhetoric on its domestic issues. The significance of the Occupy Wall Street Movement, was its demonstration on the power of social media to overwhelm domestic discourse by threading politics, civil unrest, and crowds together across the virtual and physical world.

The Military's Definition of a Crowd

Since the Cold War, non-traditional battlefields have continued to define the operational environment, causing the United States Army to shift its focus toward peace, stability, and humanitarian assistance operations.⁷⁴ This shift includes a focus on operations that span both combined arms maneuver and wide area security environments, specifically, crowd control. Multiple doctrinal sources attempt to define the significance of the crowd, in concluding that crowds serve as a vehicle for instability, civil unrest, and violence. While the military clearly understands the physical aspects of a crowd, it fails to appreciate the cognitive drive and potential of the crowd. Despite several recent examples of a crowd's influence on political and social

⁷³“Occupy Wall Street uses social media to spread nationwide,” *Columbia Broadcasting Service*, 13 October 2011, http://www.cbsnews.com/8301-501465_162-20117291-501465/occupy-wall-street-uses-social-media-to-spread-nationwide-/, (accessed 23 October 2012); see also “Social media and the Wall Street protests: #Occupytheweb,” *The Economist*, <http://www.economist.com/blogs/democracyinamerica/2011/10/social-media-and-wall-street-protests> (accessed 23 October 2012).

⁷⁴Prior to the Cold War, the traditional battlefield was linear in nature, with an adversary to the front and logistics, a reserve, and communications to the rear. The conflicts involved discernible state on state politics, encapsulated by massive combat power from air, land and sea. Non-traditional battlefields include non-state, transnational actors; non-linear, non-contiguous geography and threats that manipulate information technology, using the fourth and fifth dimensions of combat power.

change, the United States Army has yet to generate a compressive approach to crowd management, relative to its approach to counterinsurgency operations or humanitarian assistance. This misdirection is a result of reactive vice preemptive military thinking on how to manage a crowd and its energy.⁷⁵

The military's definition of a crowd contains similar language to that of accepted academic sources; however, the military's definition highlights its offensive disposition and historical theoretical misconceptions:

Crowds are a gathering of a multitude of individuals and small groups that have temporarily assembled in the same place. These small groups are usually comprised of friends, family members, or acquaintances that represent a group belief or cause. Individuals assume a sense of anonymity—viewed as just another face in the crowd. People in small groups are known only to companions in their group and to others in the gathering that have come from the same neighborhood or community. Commanders must consider how the individuals assembled and how they are interacting during the gathering process.⁷⁶

According to military doctrine, there are two types of crowds: impromptu and organized. Impromptu gatherings spread by word of mouth, while organized crowds are the result of centralized planning. Indicators of an organized assembly include evidence of logistical support, such as transportation, food, and water. However, doctrine limits its breath and understanding of a crowd's dynamics by categorizing into three types: public disorder, public disturbance, and riots.⁷⁷ Classified as aggressive in nature, doctrine regards the genesis of a crowd as the movement of people from one location to another within a given period, motivated by specific

⁷⁵As demonstrated in Army Field Manual (FM) 3-19.15, *Civil Disturbances*; FM 3-4, *Counterinsurgency Operations*; FM 3-6, *Urban Operations*; FM 3-21.12, *The Infantry Weapons Company*; and FM 3-13 (FM 100-6), *Information Operations*.

⁷⁶Headquarters, Department of the Army, FM 3-19.15, 1-2.

⁷⁷*Ibid.*, 1-5. According to FM 3-19.15; Public disorder “is a basic breach of civic order.” Public disorder is the composite of individuals or small groups assembled to disrupt the normal flow of those around them. “Public disturbance is designed to cause turmoil on top of the disruption. Individuals and groups assembling into a crowd begin chanting, yelling, singing, and voicing individual or collective opinions. Riots “are one or more groups or individuals who are part of a larger crowd that involves threats of violence against persons or property. In some cases, a crowd will continue to gather until it evolves into a riot.”

agendas, individuals, or groups. These individuals or groups further serve to influence the crowd by “yelling catchy slogans and cheers that everyone can easily pick up and join in on.”⁷⁸ Field Manual 3-19.15, *Civil Disturbances*, references both the impact of the mob-mentality and the effects of a “fight-or-flight” mentality on a crowd’s dynamics.⁷⁹ Characterized as a singular obstacle to public order and stability, a crowd’s participants are susceptible to behaving in a way that is contrary to their normal behavior. *Civil Disturbances*, examines both the motivations behind the crowd’s assembly, as well as what influences the individuals once simulated into a crowd. Field Manual 3-19.15 claims that participation within a crowd affords an individual with a sense of invulnerability, resulting in the impersonal nature of crowds and individual behaviors. The ‘them-against-us’ attitude causes those individuals within a crowd to act freely, without hesitation or reservation. This extends to acts of passive verbal abuse, which can manifest toward violent behaviors, such as throwing objects or becoming physically aggressive.

Similar to academic discourse, FM 3-19.15 claims the anatomy of a crowd begins with tension over social-political or economic issues perceived as unjust. Common grievances include hunger, inequality, or oppression. Field Manual 3-19.15 asserts that a crowd will form because of rising tensions, a small or seemingly minor incident, rumor, or act of injustice. These influencers are responsible for generating negative atmospheres of instability, consequentially transforming peaceful demonstrations into their violent extreme.

Field Manual 3-19.15 recognizes that crowds can manifest from either a single event or a chain reaction, such as “economic hardships, social injustices, ethnic differences (leading to oppression), objections to world organizations or certain governments, political grievances, and

⁷⁸Ibid., 1-2.

⁷⁹Ibid., 1-6.

terrorist acts.”⁸⁰ While this assertion has merit, the manual fails to address the complexity of crowd and the greater affect it can have on the operational environment, beyond its immediate local. In an attempt to develop a means for reacting to and controlling the threat of a crowd, doctrine outlines a three-phased evolutionary process of the life of a crowd. The gathering, or assembly, is the first phase of a crowd’s make-up. The second phase is the building of a crowd. A crowd is composed of multiple individuals or entities who will act in concert in order to achieve their objectives. The third and final phase is the dispersal process. From the military’s perspective, crowd termination is by design an unexpected emergency circumstance, or physical coercion.

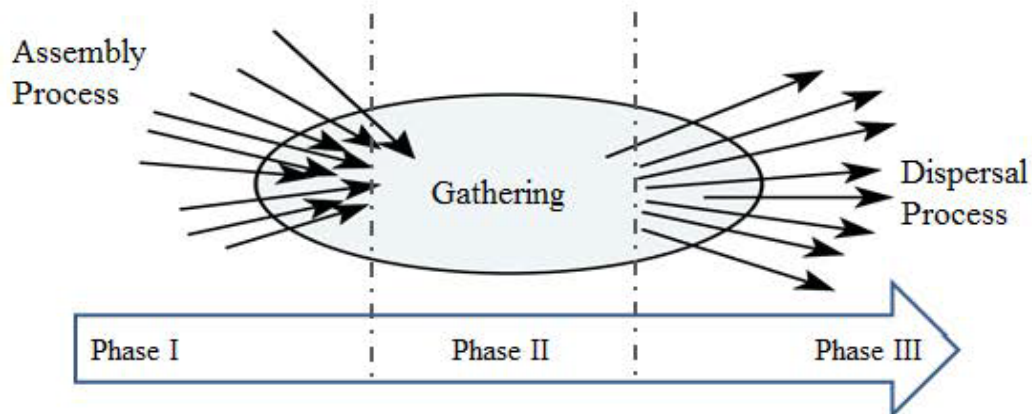


Figure 4. The Army’s Linear Understanding of Crowd Behavior.
Source: Created by author, using data from FM 3-19.15, 1-3.

⁸⁰Ibid., 1-1.

Field Manual 3-19.15 does not offer preventative measures toward thwarting the effects of a crowd; instead, it prescribes physical responses to mollify the threat of a crowd.⁸¹

The Military's Definition of Social Media

Social media is a reoccurring topic in several doctrinal sources, such as FM 3-06, FM 2-0, FM 100-6, FM 3-13, and FM 2-22.9. However, none of these manuals venture to specifically define social media, the crowd, or their dynamic relationship. Field Manual 3-21.12, unsuccessfully attempts to bridge this gap by specifically addressing the effects of the mob mentality and the enemy's ability to exploit the media. While FM 3-12.12, written in 2008, recognizes the increased complexity of the operational environment and the threats crowds pose toward stability, it uses pre-1970's definitions of the crowd and neglects to address the impact of the 2006 social media revolution. Elsewhere in doctrine, FM 3-06 addresses the influence of information operations as a mechanism to mitigate negative responses from a crowd; while FM 2-0 and FM 2-22.9 focus on the use of social media as a collection tool for providing situational awareness and patterns of life. Focusing specifically on Information Operations, FM 100-6 acknowledges the influence of the population's disposition and the media broadcasts on conventional operations. Finally, while FM 3-13 addresses the use of civil unrest and demonstrations as tools for military deception, criteria for determining operational phasing, or as a mechanism for adversarial propaganda, it does not propose means to mitigate these situations.

The most comprehensive military definition of social media comes from the Army's Office of Public Affairs. In 2011, the *Social Media Handbook* defined Social Media as a cultural shift in communications, using Internet-based platforms like Facebook, Twitter, Flickr and YouTube to connect, interact and learn. The United States Army recognizes the growing use on social

⁸¹For more information on the United State's Army's doctrinal response towards crowd management, see Appendix A.

media sites over traditional news resources and the danger that perception can outweigh factual truths. In an effort to generate positive consequences from this phenomenon, the military encourages its officers to make the best of the benefits social media has to offer, advocating social media as “a highly effective tool for reaching large communities and audiences.”⁸² While the Army recognizes the risks associated with the ability to instantaneously connect with large masses of people, its management and understanding center around a public relations perspective, and neglects to acknowledge the threat potential imposed by a third party actor. While not yet codified in doctrine, the *Social Media Handbook* does provide the most aggressive and relevant perspective on the military’s response to this trans-global phenomena.⁸³

United States Army Doctrine, such as FM 3-19.15 and FM 100-6, recognize the increased potential for crowds to use the media to exacerbate already contentious situations, to spin events in their favor, and to document fallout from engagements with law enforcement in order to gain public support. Doctrine portrays social media as a challenge, encouraging commanders to reverse the media’s negative momentum by using the exposure to promote the United States’ best interests.⁸⁴ Careful review of military doctrine as relates to social media terminology and practical considerations, demonstrates a stove-piped understanding of social media’s influence across media relations and intelligence collection, and a lack of appreciation for the synergistic influence of social media on crowd behavior and the operations environment across time and

⁸²Headquarters, Department of the Army, *The United States Army Social Media Handbook*, Version 2, 1.

⁸³For further exploration of doctrinal sources that reference social media, particularly FM 3-19.15, see Appendix B.

⁸⁴Headquarters, Department of the Army, FM 3-19.15, 2-7. Across the spectrum of military operations, U.S. forces are continuously operating in environments under intense social and political scrutiny. In these types of environments, the media becomes a tool used to document tactical actions and when made public have strategic consequences.

space. As a result, this void limits the military's ability to develop comprehensive and multifunctional approaches to managing a crowd and shaping the operational environment.

Managing Crowds and Social Media According to Doctrine

Crowds, particularly protests and riots, have historically outnumbered responding security forces, as demonstrated throughout the French Revolution and more recently across the Occupy Wall Street movements, the 2011 London Riots, and the South Korean 2008 demonstrations. The United States Army's understanding of crowd behavior has directly influenced its approach toward civil disturbance operations and managing a crowd. By neglecting to address the role of social media and the magnitude of the crowd's influence across the world to date, the military has placed itself in a position of relative disadvantage, limiting its ability to shape the operational environment and respond to it accordingly.

Current and evolving doctrine refers to social media as a passive influencer; a public relations mechanism for responding to the demands of a crowd; or as a tool for intelligence gathering practices. Field Manual 3-19.15, FM 3-06, and FM 3-21.12 are the Army's primary doctrinal sources for describing the purpose and methods for responding to civil disturbances and urban threats, yet, due to their limited understanding of the impact of a crowd on the environment and the factors responsible for influencing a crowd, they do the opposite of what they are intended for. These manuals are reactive in nature, a neglect to provide the commander with flexible options that encompass the full spectrum of military capabilities and technology. While several sources recognize the influence of modern technology as a principle means to organize a crowd, the discussion is not only superficial, it does permeate those doctrinal sources written specifically to address civil disturbances and security operations. As a result, there is a great divide between the Army's planning and response mechanism, doctrinally focused on combating physical aggression and intelligence collection for the purposes of generating offensive responses.

Given the value the military places on the role of doctrine, it is surprising the Army's most recent revision of its doctrine does address this global phenomena.⁸⁵ Across doctrine's the Army's solution toward managing social media and addressing the crowd phenomena is by dividing the issue into three distinct categories: physical response, public affairs management, and intelligence gathering.

The Physical Response

According to Army doctrine, civil control "regulates selected behavior and activities of individuals and groups."⁸⁶ Doctrinally referred to as civil control, crowd control requires channeling the population's activities as a means to provide security and coexist amongst ongoing military operations. Prior to the 1990s, the military used bayonets, concertina wire, chemical riot agents, water cannons, and rubber bullets to control a crowd's actions. According to the Army's 2003 study on the infantry's non-lethal capabilities, controlling a crowd requires immediate dispersal of the crowd, movement of the people, resolution of potential human shield scenarios, and the control of prisoners.⁸⁷ These actions serve as the core capabilities and functional areas for

⁸⁵Headquarters, Department of the Army, Training and Doctrine Command, <http://www.tradoc.army.mil/> (accessed 24 October 2012). According to the Army's Training and Doctrine Command, "Doctrine is important to the U.S. Army; it provides a body of knowledge that serves as the foundation for the Profession and for the successful execution of Unified Land Operations."

⁸⁶Headquarters, Department of the Army. FM 3-0, 3-13.

⁸⁷Non-lethal capabilities that reduce civilian casualties and collateral damage to important facilities, separated non-combatants from combatants, clears facilities and routes, and enabled crowd control were especially beneficial to the future force. According to FM 3-22.40 (FM 90-40) Tactical Employment of Nonlethal Weapons, dated 2003, (rewritten in 2009), non-lethal weapons enhance a unit's ability to discourage, delay or prevent hostile actions, limit escalation, and protect our forces. These capabilities parallel those desired capabilities of managing crowds and civil disturbances. The similarities between these two functions, highlights the importance of non-lethal activities in preventing violence. As demonstrated in contemporary operations across Afghanistan, Iraq, and Africa the need for a variety of scalable (non-lethal) options matched with selectable lethality is the cornerstone of counterinsurgency, stability, and peacekeeping options.

the employment of non-lethal tactics.⁸⁸ Not addressed are the actions that preempt the need for non-lethal force.

According to FM 3-21.12, the *Infantry Weapons Company* is ideally suited to address the threat of hostile crowds. Doctrinally, the role of the infantry company in an environment susceptible to crowds involved in mass forming demonstrations, political and social disturbances, and riots is to support local law enforcement, to protect the innocent bystanders and to try to prevent the destruction of property. Aside from utilizing law enforcement techniques and responses, as per FM 3-19.15, FM 3-21.12 offers alternative tactics and techniques, such as isolating a hostile crowd from unengaged civilians and key facilities. According to FM 3-21.12, physical isolation serves as the primary mechanism to mitigate the onset of reinforcements and to keep the scope of the demonstration contained. Only as a last case measure does the manual recommend using force to disperse a crowd.⁸⁹

The Public Affairs' Response

Appreciating the role of social media is an essential component to understanding the nature of a crowd. The *Social Media Handbook* encourages commanders to leverage existing social media applications and networking tools to promote the military's positive image. The

⁸⁸Department of the Army, Headquarters Army Infantry Center, *Infantry Non-lethal Capability Requirements*, White Paper, 2004. This paper identifies the non-lethal capability requirements for current and future combat forces. The analysis and background for this paper is based on the need to develop more options for infantry forces other than the application of overwhelming lethality within the contemporary operating environment. In this respect, non-lethal capabilities provide the commander flexibility and compliment his existing lethal applications. This paper concludes that the non-lethal capabilities identified serve as combat multipliers, not only increasing lethality, but also improving force protection across the range of military operations.

⁸⁹Headquarters, Department of the Army, Field Manual (FM) 3-21.12, *The infantry Weapons Company*, (Washington, DC: Government Printing Office, July 2008), 6-9. The tools to achieve this objective include physical barriers such as roadblocks and checkpoints.

Social Media Handbook promotes using social media to stop rumors and thwart violent demonstrations, based on the principles grounded within public affairs operations.⁹⁰

Television has replaced radio as the population's main source of news except in media environments where poverty or distance prohibits mass access to television. Fewer people may get their information from newspapers and Internet news sites... Specialized print publications and Internet sites reach a still smaller audience, but their audience will likely include officials and experts who can be expected to have influence on policy debates and outcomes.⁹¹

Along the same vein, Field Manual 3-06, *Urban Operations*, warns that the media readily influences the population's disposition and actions, and that their collective influence has a direct effect on military operations. In an attempt to mitigate the negative aspects of this effect, FM 2-0, *Intelligence Operations*, directs commanders to develop an in-depth understanding of an environment's societal factors and to develop an information operations campaign designed to influence society and to shape the environment for favorable operational maneuvers.⁹² Both FM 3-06 and FM 2-0 recognize that in the urban environment, managing and influencing the media becomes paramount to the success of military operations.⁹³

⁹⁰Headquarters, Department of the Army, *The United States Army Social Media Handbook, Version 2*, 9. Limited in its scope, the handbook encourages using both personal accounts and posting information on official command social sites to push information. The *Social Media Handbook* approaches the advantages and challenges of social media from a public affairs stance, vice its categorical and controversial information operations realm.

⁹¹Headquarters, Department of the Army, Field Manual (FM) 2-22.9, *Open Source Intelligence*, (Washington, DC: Government Printing Office, December 2006), K-4.

⁹²Not only does doctrine label the media as pervasive, it weights the media as a central figure to an urban environment's communications and information infrastructure. With relative accuracy, doctrine recognizes that the impact of globalization and the public's prolific access to technology has set the conditions for tactical actions to have strategic implications.

⁹³While recognizing the influence of social media has in inspiring fervor within a crowd, these manuals highlight the media as a mechanism that can generate or erode the legitimacy of military action. In an urban environment, portable recording audio devices, cameras, and cellular telephones serve as weapons, while access to the internet provides the means to transmit propaganda and disinformation. The threat extends beyond the ability of traditional media to achieve instantaneous global reach. Computer network hackers pose a threat in their ability to operate autonomously to collect, manipulate, and gain access to restricted information. The likelihood of the absence of media in the urban environment is improbable. Unit operations must account for the perception of their actions across the global stage. Therefore, successful operations will require commanders to consider apportioning resources to monitoring

Intelligence Gathering Responses

The military's third method for responding to crowds and the influence of social media is to use social media as a tool for intelligence gathering. Contemporary doctrine prescribes observing social media through passive techniques and procedures, focused on providing the commander with situational awareness regarding existing threats, the terrain and weather, and other civil considerations.⁹⁴ While FM 3-13, *Information Operations* does not address social media or crowds directly, it does, address the significance of civil unrest and demonstrations.⁹⁵ Field Manual 3-13, describes the role of the media as a traditional collection tool for judging operational security, gauging negative propaganda campaigns, identifying an organization's vulnerabilities, and assessing the effectiveness of information operations objectives.⁹⁶ Field Manual 3-24, *Counterinsurgency Operations*, and *Open Source Intelligence Operations* and FM 2-22.9, do clearly link social media with crowd behavior. Field Manual 3-24 examines specifically the use of social media in a counterinsurgency environment.⁹⁷ Through the employment of Open Source Intelligence Operations, FM 3-24 promotes the use of social media

and analyzing local, national and international media sources in order to derive information for intelligence and operational purposes.

⁹⁴Headquarters, Department of the Army, Army Doctrine Reference Publication 2-0, *Intelligence Operations* (Washington, DC: Government Printing Office, 2012), 2-1.

⁹⁵Civil unrest and demonstrations serve as mechanisms for deception; criteria for determining operational phasing; and as a means to gain and sway media attention for the adversary. According to Field Manual 3-21.12, the task of executing information operations within this environment is the responsibility of special operations forces. Unfortunately, it is nonspecific as to the delegation of tasks and methods; failing to address the challenges, limitations and opportunities afforded by social media in the operational environment.

⁹⁶For more information on Information Operations and Propaganda see Appendix C.

⁹⁷According to FM 3-14, the media serves as to tool for the insurgents to undermine a government or counterinsurgent's legitimacy, to generate popular support, or to excuse their offenses against rule of law, norms, or humanity. The evolving and elusive nature of the virtual safe haven, not only makes attribution and targeting extremely difficult, it also affords the insurgent with the opportunity to generate support and credibility through deception. The insurgents use private and public media companies, as well as the Internet, to push their messages to both local and global audiences. From the insurgent's perspective, both information and media activities can serve as a main effort, with violence used in a supporting role.

as a tool to exploit situational awareness and to understand the complexities of the operational environment.⁹⁸ Open Source Intelligence is “more useful than any other discipline for understanding public attitudes and public support for insurgents and counterinsurgents.”⁹⁹ Clearly recognizing the weight of the media on understanding the operational environment and assessing the results of operations, FM 3-24 provides a descriptive discussion on the effects of a crowd and the influence of open source intelligence, rather than a prescriptive method directed towards establishing courses of action for shaping the environment. Doctrinally, this descriptive approach is applicable to all levels of war and warfighting.

Across the scope of several military specialties, doctrine gradually addresses the crowd and social media, however it neglects to provide a holistic examination of the cause and effect relationship between the two. Open source intelligence is the closest doctrinal source that seeks to link the behavior of a crowd with social media and social networking capabilities.¹⁰⁰ Field Manual 2-22.9, *Open Source Intelligence*, prescribes the use of Open Source Intelligence via the Internet as a tool for collection, for the purposes of analyzing public attitudes and gauging its

⁹⁸Department of the Army, FM 2-22.9. Open source intelligence is one of several intelligence data mining capability, as per FM 2-0, Intelligence Operations. Doctrine defines Open Source Intelligence as data produced from publicly available information collected, exploited, and disseminated for addressing specific intelligence requirements. There are two components of Open Source Intelligence, open source data and publicly available information. Open source data refers to information produced without the expectation of privacy; vice publicly available information, which includes materials and information published or broadcast for general public consumption. Social media and social networking, although not mentioned doctrinally, both fall within these two categories.

⁹⁹Department of the Army, FM 3-24, 3-26. In an attempt to consider the full impact of social media technology on the operational environment, FM 3-24 offers significant discussion on the correlation between the virtual and physical sanctuaries of an insurgency. This understanding is critical in relation to lethal military response techniques, concerning the physical manifestation of crowds and the implications of social networking. In the contemporary environment, insurgencies are able to leverage the technology and dynamics of urban environments, manipulating both formal and informal networks for action..

¹⁰⁰Doctrine espouses the employment of information operations as a primary means to synchronize and assimilate religious and cultural information key groups and decision makers, discern agendas of nongovernmental organizations, collect indicators as to the composition and disposition of the adversary's forces and assets, identify military and civilian communication infrastructures and connectivity, identify population demographics, and assess media outlets. The capabilities of open source intelligence exist outside the realm of conventional unit tactics and procedures.

support towards insurgents and counterinsurgents.¹⁰¹ In line with traditional threat analysis, doctrine recognizes the value of the Internet for discerning information about relationships between individuals and organizations, and if “properly focused” the media can provide insight into understanding the operational environment. Doctrine’s solution toward managing social media and the crowd phenomena is by dividing the issue into three distinct categories, physical security, media relations, and intelligence gathering. However, individually these operational caveats fail to account for nature of social media and its potential use as a cyber-based weapons system.

¹⁰¹Department of the Army, FM 2-22.9, E-4. Open source collection formally began in 1941, with the establishment of the Foreign Broadcast Monitoring Service. This organization served to record, translate, and analyze specific broadcast programs from countries such as Germany and Japan. In 2005, in response to the Intelligence Reform and Prevention of Terrorism Act of 2004, the Director of National Intelligence created the Open Source Center (DNI-OSC) at the CIA. In 2006, efforts increased to acquire foreign media access and produce more in-depth studies, by groups such as by InterMedia and Media Tenor. One of the primary tools within the OSC includes the Internet Exploitation Team. This team focuses on the use of the internet for data mining and research

Table 1. Crowd Behavior and Social Media's Enduring Relevance

	20 th Century	Early 21 st Century	Future Warfare
Purpose	People gather in response over local grievance concerning Economic, Political, or Social circumstances.	People gather in response to local grievance to regional concern concerning specific Economic, Political, or Social circumstances.	Crowds are designed specifically to target Economic, Political, and Societal changes; generate international intervention; influence military action; or push an ideological agenda.
Mechanism	Telegraph, Newspaper, Word of Mouth	Internet, Mass Media, Social Networking	Multi-media
Time (Organization)	Months – Years	Hours – Days	Minutes – Hours
Time (Gathering)	Days – Weeks	Weeks – Months	Months – Regenerative
Space	Localized	Localized- Regional- Transcontinental; emergence of Virtual Sanctuary.	Virtual and Physical Environment –Transcontinental; Virtual Sanctuaries.
Response	Physical Force	Physical Security, Containment, Public Relations Pacification, Intelligence Gathering	<u>Recommendation</u> : Awareness and Response must blend physical and virtual environment, to address root grievance and thwart escalation to violence or destruction of property.
Historical Examples	1919 Arab Spring French Revolution	20100-2011 Arab Spring Occupy Wall Street	

Source: Created by author.

RECOMMENDATION

The role of social media has become a permanent variable in understanding and shaping the operational environment. As illustrated in Table 1, a revolution that once took months to unfold, can now take place now in a matter of days and manifest within a matter of hours, via social media. Social media has become one of the most significant means toward driving political advocacy and militant activism, motivating civil unrest and inciting social change. In the last five years alone, social media has either enabled or launched massive political and demographic change across Europe, Africa, and Asia. Due to the speed at which information travels, commanders at all levels must understand the compressed effects social media can have on the operational environment.

At the operational level, social media poses a direct threat toward organizing and influencing a crowd, which can cause it to act in a detrimental manner toward our military objectives. The United States Army needs to come to a consensus on its approach toward managing a crowd, while holistically addressing the influence of social media on the operational environment. A solution can be found threading together the definitions and methods found in its current *Public Affairs, Civil Disturbances, Information Operations* and *Intelligence Operations* doctrine with contemporary social science research and technology based capabilities. At present, the closet asset the military has at the operational level for filling this void is the Asian Studies Detachment, a niche capability within the realm of Open Source Operations. The Asian Studies Detachment exchanges information and links tactical military information operations to the resources afforded by national-level agencies.¹⁰² The all-inclusive aim of the Asian Studies Detachment, serves as an ideal building block for engineering future Army support capabilities.

There needs to be greater operational focus on social media, beyond the strategic capability of agencies such as Open Source. A relationship between those who monitor and track media stories and social networking sites, to those who are directly affected by the energy and momentum of the crowd it influences. At the operational level, the ideal system would incorporate a cyber-network capability, integrated within conventional commands, dedicated to monitoring, intercepting and collecting the information passed within the cyber environment. The system would require a means to parse the information into categories, ranging from immediate threat-based indicators to positive influencers. This interface could bring forth a completely new dimension in military operations, as it exponentially increases a commander's ability to

¹⁰²Headquarters, Department of the Army, FM 2-22.9, 3-9 and A-2. The Asian Studies Detachment is responsible for conducting "sustained Internet collection, processing, and intelligence production. This enables the deployed organizations to focus their resources on collecting information from public speaking forums, broadcasts, and documents that are only accessible from within the AO." For more information see:

understand and to shape his operational environment. Universally defining and scoping the potential offensive and defensive uses of social media is essential to avoiding the pitfalls experienced by the Iranian and Egyptian governments, while capitalizing on the successful practices of the British government.

The relationship between the United States Army's operational forces on the battlefield and the emerging role of social media within military operations is interdependent. Social media, via a fully integrated cyber capability, can read and shape the strategic context of an environment, while manipulating and enveloping tactical objectives. To achieve success the Army must develop an approach that is transparent with clearly defined rules of engagement. Losing public credibility is the greatest vulnerability our forces face by operating within the social media domain. The adversaries may operate without such constraints, but an educated society can eventually see through this façade. Friendly forces must maintain credibility within their overt social media ventures. Placing positive spins on information and always presenting positive news stories while blocking negative overtures, will result in the loss of credibility and negate the entire purpose of engaging within the social media realm. There must be an acceptable level of negative information allowed to propagate. Tolerating negative themes, as demonstrated by the London Riots, can have very positive second and third order effects. Very much like a chess game, operating in the social media domain requires a player to think strategically ten tactical moves ahead, influencing where the opponent will move, and shaping the battlefield to gain control, ending the game by design vice hap and circumstance.

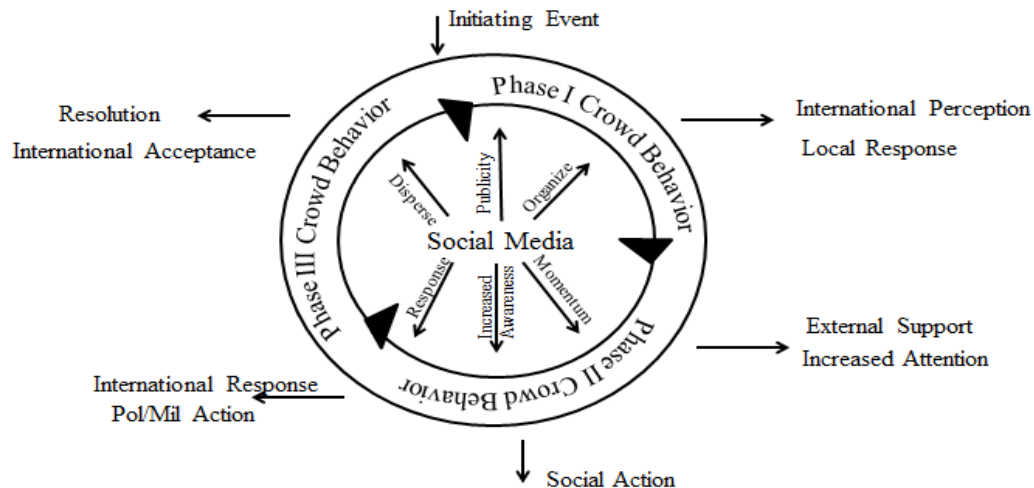


Figure 5. Relationship between Social Media and Crowd Behavior in the Operational Environment.

Source: Created by author.

CONCLUSION

The evolution of social media has decisively altered the relationship between society, politics, and military conduct. As demonstrated by the Arab Spring and subsequent events across the globe, social media has dramatically changed the operational environment by decreasing the time it takes for information to spread, widening the audience to which information is accessible. With society using the crowd as a mechanism for change, social media serves as the means for organizing, sustaining, and determining the scope of a crowd. Understanding the influence of social media on crowd behavior is vital component of the operational environment that future military operations must factor into both planning and execution. Neither the United States Army's 2015 doctrine, nor its legacy components address social media and crowd behavior holistically. Instead, doctrine divides its responses into three responsive categories, based on a twentieth-century understanding of social behavior and crowd theory. As the military postures and trains to respond to multiple and simultaneous crisis situations across the globe, developing a

holistic multifunctional approach to crowds and the influence of social media will become increasing essential to achieving military prowess and securing our national interest.

One of the greatest challenges to understanding and managing a crowd occur in those regions where there is no rule of law, particularly in weak and failing states. The complexity of this dilemma generates further complications in those regions where access to handheld technology outweighs the foundations of a formal infrastructure. In these scenarios, responding military forces often find themselves at both a cultural and ideological disadvantage. In underdeveloped nations, the lack of situational awareness and partnership opportunities with law enforcement breeds greater challenges for long-term stability and conflict resolution. The ability for social media to reach and attract a variety of potential crowd participants adds to the crowd's complexity, particularly in its violent form. The unwitting addition of protestors as human shields and the concept of swarming produce the challenges for responding military and law enforcement agencies. Recognizing the source of a crowd's influence and the dynamics of composition prove essential in preventing an unnecessary escalation of force, indiscriminate violence, and the repressions of negative media coverage and propaganda. As illustrated through historical examination, response forces limit themselves to methods of pacification or containment, never addressing the root of the problem. As a result, the negative cycle perpetuates itself, as the original causes of the unrest continue to fester and spillover across both time and space.

Social media can prevent or incite the conditions for civil war, fragment a society, undermine an organization, and destabilize a nation. It can deter nefarious efforts to exacerbate tensions and human suffering or identify the reconciliatory conditions for long-term stability. In London, social media can be a positive mechanism for identifying political, military, or social solutions to complex problem sets, finding the middle ground for negotiations. In South Korean and the United States, social media can influence elections, as well as replace or undermine legitimate media sources via blogs and tweets. Social media can manifest into an intangible risk

within a security environment due to its free and unmanaged state. The ability to manipulate social media and social networking provides an option of control via the insight and knowledge social media provides into society's near real-time disposition. The military must decide what amount of risk it is willing to take at the operational level, determining the extent to which it will participate in the cyber domain.

Social media is a dynamic tool that can simultaneously monitor, influence, and control society's behavior. Social media is a vehicle for understanding the operational environment, defining and scoping the composition and disposition of the battlefield, and the operational centers of gravity. Whether the center of gravity is the population, political leadership, the youth, or even the military, social media, and cyber network operations have the ability to both understand and influence them as a whole. Social media as a weapons system falls in line with the discourse of current military doctrine's definition of unconventional warfare.¹⁰³ Current doctrine defines unconventional warfare as efforts or activities designed to "enable a resistance movement or insurgency to coerce, disrupt or overthrow a government or occupying power by operating through or with an underground, auxiliary and guerrilla force in a denied area."¹⁰⁴

Unconventional warfare uses a society's existing discourse to exploit and accelerate efforts against an adversary's political, military, economic, and psychological vulnerabilities. Similar to the goal of a revolution, unconventional warfare tactics seek to disrupt or overthrow an opposing regime. Inspired by the Arab Spring, the demonstrations in Libya highlight the Libyan rebels' use of unconventional warfare tactics to topple their government. Unlike demonstrations elsewhere, the rebels and their supporters used social media as a mechanism for generating international support and consensus.

¹⁰³Petit.

¹⁰⁴Department of the Army Training Circular No. 18-01, *Special Forces Unconventional Warfare*, (Washington, DC: US Government Printing Office, November 2010), 1-1.

Particularly at the operational level of war, campaign design must consider all phases of a crowd's formation and its impact on both conventional and unconventional operations. This requires Army planners to incorporate the impact of social media on crowd behavior as an element of considerable consideration throughout the planning and assessment processes. Recognizing the significance of social media and its role within a society should be at the forefront of intelligence efforts to understand the operational environment. Understanding the virtual actors is just as important as understanding the physical components of the operational environment. Further understanding the virtual environment enables analysts to categorize actors as either positive or negative influencers. Monitoring their activities not only provides insight into their actions, it also provides a means for analysts to gauge the perception of friendly forces and assess their effectiveness. During the first phase of a crowd's transformation from its virtual state to a physical manifestation, social media access is paramount to intelligence analysis, serving as the primary means for recognizing the crowd's objectives and disposition. During the second phase, social media serves not only as a tool for intelligence purposes, it becomes a virtual countermeasure to manage, mitigate, and influence a crowd. Leveraging social media as a part of the targeting process during the lifecycle of a crowd provides the commander with greater options and situational awareness. By targeting specific audiences and sites, social media provides an outlet for countering negative or erroneous information through either overt or covert means. The effects of social media as cyber-based weapons system can be lethal if not equally matched both offensively and defensively across the physical and virtual domains. As demonstrated by the Iranian government, flooding the social media sites with contrary data can overwhelm the observer and lessen the veracity of the opposition.

Since 1997, the United States military and its doctrine has progressively advocated for military practitioners to achieve information dominance to solidify their understanding of the

operational environment.¹⁰⁵ Using information warfare to expand the realm of control over the adversary in order to deny, exploit, corrupt, or destroy an adversary's information and its functions, in an effort to establish both security, stability, and gain a physical advantage. The Department of Defense regards information superiority as maintaining a decisive operational advantage. Information superiority allows friendly forces to "collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same."¹⁰⁶ The proliferation of social media into the lexicon of military thinking and battlefield dynamics makes achieving this objective seemingly elusive; even more dangerous, however, is ignoring its role in shaping and influencing the discourse and reality of warfare. With the revitalization of military doctrine in the twenty-first century, efforts need to continue to broaden the Army's understanding of the operational environment and the factors that influence it, recognizing the influence beyond physical circumstances and including the importance of the virtual domain.

The United States Military must be prepared for, and capable of, responding to the unexpected. The best means to accomplishing this is predictable analysis that will allow military forces to target a problem set before it escalates to the point where lethality becomes the military's only recourse. Understanding what triggers a crowd into assembly and action can preempt its escalation and mitigate collateral damage in its initial phase and maturation. By limiting its understanding, the military is limiting its approach and effectiveness toward addressing the security dilemma caused by the potentially cataclysmic relationship between social media and the crowd. As a result, the military is limiting its options, minimizing its flexibility,

¹⁰⁵Mica R. Endsley and William M. Jones, *Situational Awareness, Information Dominance, and Information Warfare*, February 1997, Technical Report 97-01, Wright-Patterson Air Force Base, 1997.

¹⁰⁶Headquarters, Department of the Army, *Army Vision 2010, Information Superiority*, http://www.army.mil/2010/information_superiority.htm (accessed 23 October 2012).

and ultimately constraining its discourse. The United States military must expand its niche cyber capabilities and understandings to allow access and interoperability beyond the strategic level, to the operational level. Through the proliferation of decentralized teams or centrally managed reachback, military units must be equipped to exploit technology and the information environment. Just as future military operations will continue to amalgamate elements of combined arms maneuver and wide area security, the environment will no longer be contained or void from the influence of social media.

APPENDIX A: DOCTRINAL CROWD REFERENCES

Common across the Army's doctrinal sources is the understanding that "the crowd" is a battlefield consideration that military units must be prepared to respond to at varying degrees.

Doctrine's primary response to managing a crowd is via physical techniques, such as isolation or pacification.

Army Field Manual 3-19.15, dated 2005, is the United States Army's most current source for addressing and managing civil disturbances.¹⁰⁷ This manual originated for the purposes of addressing civil disturbances, as one of the many factors in the transition from a conventional to a hybrid environment. Field Manual 3-19.15 serves as the most comprehensive piece of Army doctrine that addresses crowds and civil disturbance operations within both the United States and abroad.¹⁰⁸ Designed specifically for the purposes of the military's response to crowds, FM 3-19.15 approaches the problem of the crowd and civil unrest from a law enforcement perspective. Providing a calculated and systematic approach to crowd response, FM 3-19.15 serves as an instructive tool for military commanders to support civilian authorities and plan to operations to deal with situations ranging from non-violent protests to full-scale riots.¹⁰⁹ Field Manual 3-19.15 is the only doctrinal source that presents both a lethal and non-lethal approach toward managing a crowd. Although FM 3-19.15 offers the most comprehensive examination of crowd anatomy, it is

¹⁰⁷Department of the Army, FM 3-19.15, iv. This manual is currently under revision, with an expected release date in 2015. The revised document does not intend on modifying its definition of a crowd or including information on influence of social media on a crowd's behavior.

¹⁰⁸*Ibid.*, iv. The manual categorizes the environment as spurred by increased U.S. military involvement in peacekeeping and stability operations, by providing the necessary tactics, techniques, and procedures for quelling riots, neutralizing special threats, and restoring public order.

¹⁰⁹*Ibid.*, 1-1.

limited in consideration of those factors that influence a crowd's behavior; its non-lethal approaches neglect to include the physiological potency of the cyber domain.¹¹⁰

Field Manual 3-06 on *Urban Operations* defines the crowd as a mechanisms for expressing social unrest, serving as human shields for nefarious actors, a physical impediment to a unit's mobility and maneuver, or an obstacle for rules of engagements used to complicate conditions on the battlefield and impede military operations. Field manual 3-06 perspective on crowd behavior is limited, cataloging crowds as an obstacle to military operations. While, FM 3-06 recognizes that operations conducted within highly dense populations pose a challenge to security forces across the range of military operations, from peacekeeping to combined arms maneuver, it is limited in its understanding of a crowd. According to FM 3-06, crowds are groups of individuals "paid or incited to demonstrate against military forces, armed only with sticks, stones, and Molotov cocktails (a potential asymmetric challenge)."¹¹¹ The manual classifies the management of a crowd as it escalates towards violence is a secondary task for military units.¹¹² Field Manual 3-06, categorizes these operations as urban stability and civil support operations, primarily occurring in phase IV and V of an operation.¹¹³ Military doctrine on counterinsurgency operations reaffirms this perspective, concluding that crowds are a mechanism for violence against conventional military units occurring principally within phase IV and V operations.

In counterinsurgency operations, a military commander's response options range from "doing nothing" to physical crowd control. Field Manual 3-24, *Counterinsurgency Operations*,

¹¹⁰Ibid., 1-3. Specifically referenced within FM 3-19.15 are telephone banks, mailing lists, and e-mail; social media is not.

¹¹¹Headquarters, Department of the Army, FM 3-06, 3-7.

¹¹²According to Field Manual 3-06, within this sub-task the role of the military is to augment law enforcement authorities or specialty units. The tools given for these types of operations include the use of antiriot gear, such as batons, protective clothing, and other nonlethal crowd-control devices.

¹¹³United States Department of Defense, Joint Publication (JP), 3-0, *Joint Operations* (Washington, DC: Government Printing Office, 2011), v-6. Operation Planning Phases. Phase IV is Stabilize and Phase V is Enable Civil Authority.

offers a different perspective from FM 3-19.5, espousing that demonstrations are predominately an insurgents' tool for both inciting violence against counterinsurgency operations (COIN) and generating popular support toward insurgent themes. According to this perspective, crowds are neither a threat nor a concern until they become either an obstacle or vehicle for violence.

APPENDIX B: DOCTRINAL SOCIAL MEDIA REFERENCES

Field Manual 3-19.15, the Army's foremost source for addressing the dilemma of civil disturbances, notes the relationship between social media and crowd dynamics within the operational environment as a mechanism for propaganda used to influence a crowd. The manual does not categorize social media as a primary threat mechanism or influencer of crowd behavior. Rather, the manual categorizes social media as an influencer of public relations operations, as both a tool for protesters to use to gain sympathy for their cause, and as an obstacle to commanders and law enforcement initiatives. Unfortunately, the context of this significant data point serves merely to demonstrate the need for commanders to be cognizant of how their unit's actions can affect the disposition of the environment: "Just one provoked action of a soldier could be interpreted as an act of brutality by the media."¹¹⁴ This portrayal of the media as a potential threat to security continues throughout the manual. While FM 3-19.15 gives credit to the role of social media in motivating the public's actions, it does little to address the magnitude of its influence, consequence, or positive application.

According to FM 3-19.15, public relations messaging and social media are synonymous concerning civil disturbance operations. Field Manual 3-19.15 asserts that the actions of a crowd are in response to its internal dynamics vice external motivators: the "emotional contagion is the most dramatic psychological factor of crowd dynamics. It provides the crowd with a temporary bond of psychological unity."¹¹⁵ In an attempt to address the social science aspect of a crowd's anatomy, FM 3-19.15 argues that individuals within a crowd will transfer their moral responsibilities to the crowd as a whole, basing their behavior off the actions of those within their immediate area. Army doctrine professes that "only the strong...can resist the prevailing behavior

¹¹⁴Department of the Army, FM 3-19.15, 1-19.

¹¹⁵Ibid., 1-6.

of a crowd.”¹¹⁶ Claiming that crowds have the propensity to become violent, from situations of increased violence, to panic and mob like scenarios, the manual focuses more on military response techniques vice prevention and pacification.

Field Manual 3-06 recognizes that technology is responsible for broadening the scope of the operational environment. In the urban environment, computers consequentially link the multiple elements of the urban infrastructure to other parts of the world, creating “important implications for commanders of a major operation.”¹¹⁷ However, FM 3-06 does not offer a solution or methodology for responding to this phenomenon.

¹¹⁶Ibid.

¹¹⁷Ibid., 2-21.

APPENDIX C: INFORMATION OPERATIONS AND PROPAGANDA

Not categorized under as an intelligence capability, Information Operations similarly seeks to achieve greater situational awareness. As per FM 100-6, Information Operations involves combining offensive and defensive tactics to produce information superiority at decisive points. While FM 100-6 recognizes the importance of managing information operations and the ability to achieve information superiority, it does not address the application of social media and its effect on crowd behavior. Field Manual 100-6 is limited to discussing the aspects of employing information operations against a defined adversary; it does not explore the threat from public or commercial venues. Achieving information superiority requires military commanders to focus on improving their understanding of the operational environment “while affecting adversary battlefield perceptions in a way that leads them to make decisions favoring friendly forces.” Although not explicit within the manual, the ability to project these narratives and influence favor amongst the population typifies social media’s contribution to the contemporary operational environment. Indirectly, in its discussion on the role of counterpropaganda, FM 100-6 highlights the significance of social media. Counterpropaganda is an offensive capability associated with physiological operations within current Information Operations doctrine and it best describes the positive attributes afforded by social media management.¹¹⁸ Overall, counterpropaganda operations serve to reduce the ability of adversary’s propaganda to influence or impede friendly forces in the area of operations from accomplishing their mission.

¹¹⁸Psychological operations focus on military deception and seek to convince adversarial decision makers to take certain actions. In their defensive role, psychological operations seek to deny the adversary’s exploitation of the target population via producing favorable images of U.S. forces; bypassing censorship and other communications hurdles to convey particular messages; and targeting the adversary in an attempt to degrade his morale, reduce resistance, influence and exploit identified weaknesses or vulnerabilities. Tactical employment uses face-to-face interactions, printed products and broadcasts to achieve its objectives. Collectively, these operations are consistent with strategic and operational objectives; doctrinally these methods include traditional media exploitation, such as television, radio and printed products to influence the adversary and civilian population.

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